

INTRODUCING PROGRAM EVALUATION INTO A SMALL AGENCY

A CASE STUDY

By

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DEDICATION

To Jose

For your continuous support and understanding.

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Mike Stockdale

INTRODUCTION

This research project has a dual focus. First, it is a case study of the introduction of program evaluation into a privately-run, residential treatment facility. It reviews staff experiences which followed on the agency decision to introduce program evaluation into its daily operations. Secondly, it provides a preliminary data analysis of the data that the agency staff have collected through the evaluation project. This preliminary data analysis employs a method of analysis which is new to the agency. In addition, it includes an implementation aspect in which this researcher shares with the staff the preliminary analysis of the data collected by the agency and the observations of the researcher on the process through which program evaluation was introduced into the agency.

As indicated, the first focus of this research project reviews the events surrounding the introduction of program evaluation into the agency. It uses the literature on program evaluation as a means of identifying issues relating to the evaluation of programs and to the involvement of staff in the process of program evaluation. In the light of this literature review, it examines the issues that arose as agency staff worked in developing the evaluation project. Through a series of focused interviews with staff at the agency it identifies the major issues that staff identified regarding the evaluation project. This project, thus, provides agency staff with an opportunity to retrospectively review their experiences of the implementation of the evaluation project. It identifies some of the unique problems that the evaluator addressed in the process of gaining staff support of,

and participation in, the evaluation effort.

In addition, this research project examines a series of papers written by the agency evaluator which describe the development of the evaluation project. The analysis of these papers assists in examining the experiences of staff at the agency as the evaluation project developed. Through the focused interviews, the analysis of the evaluator's progress reports, and the examination of the literature, this research project provides deeper insight into the issues facing evaluators. It demonstrates the degree to which the evaluator was able to identify, address and resolve some of the staff issues with regard to the evaluation project.

The second focus of this research project analyzes the data that staff have collected over the past years. The data analysis employs a single-subject approach. This researcher believes that the single-subject approach provides staff with richer and more productive data for planning treatment for families. This belief is based on the recognition of some of the shortcomings of traditional group statistical analyses which tend to obscure the uniqueness of the individual in the presentation of group averages or profiles. The single-subject approach, however, preserves the uniqueness of the individual by analyzing each individual subject separately. Single-subject design also alleviates the problems that the agency faces from lacking a control group for statistical comparison. This problem is resolved by having each individual studied act as his own control group.

This research project does not attempt to collect any other original data from clients, but uses the previously collected data for agency clients and

employs a non-parametric type of statistical analysis to this data. The use of non-parametric statistics avoids making any assumptions about the nature of the distribution of the subjects over a normal curve or any other similar distribution plot. The analysis provides staff with outcome results on individual cases and provides staff with the first opportunity to examine the results of their treatment program.

As a final benefit this research project suggests areas for further research and change in the evaluation project at the agency. It suggests studies that may be conducted to improve the reliability of the agency information system. It also suggests measures that the agency may wish to implement in order to establish the true effectiveness of its program. The project benefits the agency in continuing its program evaluation efforts by suggesting additional forms of data collection, data recording and data analysis for the project.

Volume I of this research project provides the reader with the theoretical underpinnings of this research project and a description of the agency studied. This particular thesis has two complementary and sometimes divergent foci - the case study and an evaluation study. Volumes II and III each contain a section on problem definition, study design, a literature review, a data analysis and recommendations and conclusions. In this way, this project is more useful to individuals reading it. For those who are interested in the evaluation study, it is possible to ignore the discussions about the actual implementation of the evaluation project at the agency and consult only Volumes I and II. Similarly it is possible to explore the outcome results of the agency's evaluation study separately, by reviewing Volumes I and II, without having to read about the introduction of

program evaluation into the agency. This division makes it possible to explore more thoroughly the trend throughout a particular study rather than have a reader switch back and forth between the two foci of this research project.

Volume II, Chapter III, on the staff's view of the evaluation project deals with the study of the introduction of program evaluation into the agency. It presents the material around program evaluation techniques and methods and the impact that the introduction of this particular evaluation project had on staff at the agency.

Volume III, Chapter IV, presents the material that staff at Children's Foundation have collected through their evaluation efforts. This chapter analyzes the data and presents interpretations from that data. This chapter is referred to as the data analysis project.

CHAPTER I: THE ARGUMENTS FOR PROGRAM EVALUATION:

POINTS OF DEPARTURE

In today's "age of accountability", severe criticism is being levelled against the social work profession in general and the case work method in particular. From within and without the ranks, more emphasis is being placed on the need for social workers to demonstrate that what they do is worth supporting. No longer can the effectiveness of social work be accepted as self-evident, nor can the questions surrounding it be stilled by rhetoric. It is clear that social work must describe more concisely the interventive actions of practitioners, as well as incorporate into agency operations the means for monitoring and assessing the results of these actions.

An increased interest in evaluative research reflects this growing concern.¹

The above quotation raises the question of accountability of social work practice and links the solution of this question to the developing art of evaluation research. It will be helpful to begin this report by analyzing this quote and the article from which it is taken; this analysis assists the individual in understanding the aims and direction of this research

project. From an analysis of this article, one can conveniently proceed to a review of other items of literature which have significantly contributed to the development of this particular project.

The article argues that the "increased interest in evaluation research reflects"₂ an interest in the ability of social work to account for the effectiveness of its services. The article goes on to suggest a method by which social work practitioners can account for the services they provide and demonstrate the effectiveness of those services. For any profession to be accountable to its clients is a tall order indeed. The purpose of such accountability in the social service field is to first enable social scientists to keep better records of what we do and the subsequent outcomes of our actions. Secondly, accountability implies that social scientists must use the resulting data to improve the services it provides its clients. Eventually, this offers the best hope of improving the effectiveness of social service delivery. As a result the article suggests that a structured recording system is one means among many that may be used to monitor practice more effectively and provide a method of making some changes that will improve the effectiveness of the service.

The authors outline a method by which social work practice and research can be integrated more effectively. The focus of their article is to encourage the use of a coded recording system for student practitioners in field placements. The authors feel that the use of such a recording system will enable students to make more effective use of social work research while at the same time improving their social work skills. They argue that the coded recording system will assist students and practitioners in assessing their performance in the field.

Thus students acquire both research and practice training, with few opportunities to test and translate the knowledge gained in one orientation to that gained in the other. In addressing this issue, the authors will illustrate how a coded recording system, when used in conjunction with student research and field placement courses, can facilitate the integration of research and practice.³

While the focus of their article is to promote the use of a coded recording system to help integrate social work research and practice for students, the question that is more important to this research project is the question of accountability for social work practice. Although the article was primarily directed at social work students, the implications for social work are significant. The authors suggest that social work students would be able to account for their practice and to improve their practice skills through the coded recording system. But this is only a tip of the ice-berg. "The recording system possesses the potential to help end the long-standing estrangement of research from practice."⁴ Such a coded recording system has the potential of assisting social work in addressing the demands of the "age of accountability" by producing evidence as to the effectiveness of social work services. As a result, this particular article sparked an interest in the ability of social work to account for its effectiveness and an interest in evaluation research.

Along with the growing interest in evaluation research came the realization that evaluation represents a new and perhaps threatening innovation to staff in the social work field. Consequently, this researcher developed an interest in the impact of evaluation on social workers. As a result,

the researcher attempted to find articles on evaluation research which might help to put into perspective the potential impact of evaluation research on staff. The most promising area of literature came from the loss and change literature, and in particular, Peter Marris's book on Loss and Change. It was felt that the impact of evaluation research on staff assumed the form of threats and benefits. While it might be beneficial for social work to be able to account for its services, the concept of evaluating one's own work, or being accountable, represents a serious threat to the field. What is more, the concept of evaluating one's work through evaluation research represents an innovation in the field of social work. Consequently a brief review of the major concepts of Marris's work will be helpful in understanding the direction of this research project.

In his book Loss and Change, Peter Marris sets out to describe the impact of change on everyday lives. He notes that "whether the change is sought or resisted, and happens by chance or design; ... the response is characteristically ambivalent."⁵ Change represents a significant disruption in an individual's life. Consequently, Marris argues, there is a natural tendency for the individual to attempt to restore the past or to revert to past forms of behaviour. The ambivalence that change produces in an individual represents an attempt to ignore the new dimension in the individual's life and return to a more comfortable and familiar pattern of behaviour.

The book begins with a discussion of conservatism, because the argument as a whole depends on the assumption that the impulse to defend the predictability of life is a fundamental and universal principle of human psychology. Conservatism, in this sense, is an aspect of our ability to survive in any situation: for without continuity we cannot interpret what events mean to us, nor explore new kinds of experience with confidence.⁶

This conservatism is an attempt to incorporate into already existing frameworks of understanding the meaning of all new experience. Marris notes that assimilation is a conservative approach to innovations. By assimilating new experiences into the already existing framework of understanding, the individual can maintain his pre-existing frames of reference and understanding. When it is impossible to assimilate new experiences into these pre-existing frames of reference, then the individual must make more serious alterations to the frame of reference. The conservative impulse as a result represents a resistance to change. It represents an attempt to maintain the "structures of meaning".

By the conservative impulse I do not mean political conservatism, but the tendency of adaptive beings to assimilate reality to their existing structure, and so to avoid or reorganize parts of the environment which cannot be assimilated. Changes in structure seem only to be possible gradually, within the limit of what can be assimilated. I am concerned in this book with the organized structures of understanding and emotional attachments, by which grown people interpret and assimilate their environment. I have called these "structures of meaning" 7

The frames of reference which the conservative impulse attempts to maintain, or, in Marris's words the "structures of meaning", provide the individual with predictability in his life. If an individual is to understand what is happening to him, he must be able to understand his relationship to others, and to predict the behaviour of others on the basis of his understanding of the purposes and goals of other individuals. The importance of this predictability is that it is the basis for meaning and understanding of the world. This basis begins in early childhood, according to Marris.

The context of meaning evolves from earliest childhood, and becomes so structured and integrated that it cannot in time be radically changed without fear of psychological disintegration.⁸

As a result, our ability to deal with the environment depends on us preserving our fundamental understanding of the environment. Consequently, new experiences that will not fit in our framework with which we analyze and interpret events in the world, represent serious threats to our understanding of the world.

Since our ability to cope with life depends on making sense of what happens to us, anything which threatens to invalidate our conceptual structure of interpretation is profoundly disruptive.⁹

Where it is not possible for an individual to incorporate new experiences into his understanding of the world, then an attempt may be made to deny

the implications of the change through some form of maladaptive behaviour.

It is obvious that when an individual is forced to change his "structures of meaning" that the individual faces a significant disruption in his understanding of the world. Where the conservative impulse cannot deny or assimilate new changes in the environment, then the individual is forced to change. This change is accompanied with a degree of anxiety which Marris describes as being equivalent to a grief process. As a result, the individual is forced to incorporate the new experience into the framework of understanding. But this process of incorporation may be accompanied by a sense of loss as the individual experiences a loss of the previously understood "structures of meaning".

When a pattern of relationships is disrupted in any way for which we are not fully prepared, the thread of continuity in the interpretation of life becomes attenuated or altogether lost. ... The conservative impulse will make us seek to deny the loss. But when this fails, it will also lead us to repair the thread, tying past, present and future together again with rewoven strands of meaning.¹⁰

The tying of "past, present and future together" is not an easy process. Marris notes that this represents a process of growth and change in the individual. It also generates a sense of loss. The sense of loss can be accompanied by a grieving process which becomes an adjustment to the new frame of reference or understanding of the world.

Marris goes on to explain that he does not believe that the conservative impulse is totally defensive. He notes that as individuals grow, they become accustomed to adjusting to biological and social demands placed upon them.

For though children regress to earlier patterns of behaviour when they cannot cope, and adolescents are ambivalent in their search for maturity, they also look forward eagerly, curiously and impatiently to their future, bored with achievements that come too easily.¹¹

As a result, the conservative impulse represents an attempt to maintain one structure of understanding into which all new experiences can be integrated. Frequently this is not possible and it becomes necessary to change the frame of reference of the individual. Such changes can generate anxiety for the individual, since the change represents an adventure into the unknown. It is at this point that the individual can experience a sense of loss, since, in fact, a loss has truly occurred. The individual has lost the familiar and is in fact moving into a new and broader understanding of the world.

Conceived in this way, the idea of growth does not contradict the assumption of a conservative impulse. ... Different kinds of change can be discriminated in terms of misbalance between continuity, growth and loss. First, many changes are incremental or substitutional: the purposes they seek to satisfy and the pattern of expectations remain essentially the same ... the continuity of life is unbroken. ... Second, there are changes

which represent growth. Here, too, familiar purposes and expectations are not disrupted, but incorporated within a broader understanding or range of interest. ... A growing person is confident enough to explore new experiences just because the basis of understanding seems secure. ... Third, change may represent loss, either actual or prospective, from death or from discrediting of familiar assumptions - a crisis of discontinuity. And from this arises both innovation and despair.¹²

The implications for this research project of Grinnell and Kyte's article on coded recording systems are numerous. While the authors are attempting to demonstrate that social work research and practice can be merged through the use of a coded recording system, the implications for the Children's Foundation and this research project are that such a coded recording system would enable practitioners to get feedback on their practice skills.

Through a carefully developed recording system it is possible to demonstrate the effectiveness of a service or a particular worker. Consequently, the implication is that a coded recording system will provide a worker the opportunity of obtaining feedback on his work while at the same time providing evidence as to the effectiveness of the agency program. Also Grinnell and Kyte's article supports the evaluation program at Children's Foundation by suggesting that the evaluation program will, like a coded recording system, be able to provide feedback to the staff on their treatment outcomes. This will then enable staff at the Foundation to change, improve or reject case work techniques in working with clients at

the agency.

The literature on loss and change as summarized from Peter Marris's book Loss and Change casts a new light on the impact that the introduction of program evaluation into the Children's Foundation had. Understandably, evaluation, or the evaluation of one's work at the agency, represented a new form of experience for staff at Children's Foundation. The thesis of this particular research project is that the introduction of program evaluation into the Children's Foundation represented a significant change in agency operations - a change which in some way had to be incorporated by staff. Thus, Peter Marris's book on loss and change provided a first focus for this research project, which was to examine staff feelings about the introduction of the evaluation project to the Foundation. As a result of the reading of Peter Marris's book, this researcher became interested in assessing the degree to which the evaluator was able to reassure staff about the research project and its motivations.

The article by Grinnell and Kyte and Peter Marris's book also stimulated this research project's interest in the impact that evaluation has on staff at an agency. As a result of the reading of these two articles, this researcher developed a questionnaire interested in measuring the impact that the introduction of evaluation has on staff at an agency. In addition to the question of the impact of evaluation research, the articles prompted this research project to become interested in questions around the ability of the evaluation project to measure outcome or to

document program successes. Grinnell and Kyte suggested that coded recording systems are useful in providing feedback on outcomes. On the other hand, Peter Marris's book suggested some of the impacts that this research project might expect to observe in the staff through the introduction of the evaluation project.

The third piece of literature that influenced the direction of this research study was a book by Michel Hersen and David H. Barlow entitled Single-case Experimental Designs: Strategies for Studying Behaviour Change. This particular work provided a review of the two research designs that could be used in the analysis of the data collected by Children's Foundation. In this particular work, the authors reviewed a number of the difficulties that traditional experimental research design and comparative statistical analysis encounter in dealing with research in the social sciences. The authors reviewed the arguments necessary to support single-subject or single-case research design and analysis in the social service research field. Since this particular work provided the direction for the analysis of the Children's Foundation data, it is worthwhile reviewing the arguments the authors present to demonstrate the practical value of adopting a single-case research design in data analysis for this research project.

The authors of this particular work indicate that the foundation for research in the social sciences began with the research in physiology and

psychology. They explore a number of authors' work beginning in the 1830's to demonstrate the trend that began with single-case studies of particular phenomena and particular individuals that were eventually worked in the basis for group comparisons. As the sciences of physiology and psychology developed, then, there was a trend to use single-case studies and combine the results of these studies into a group analysis or group theory. These group theories then became useful in predicting outcomes of human behaviour.

The authors note that this progression led to the group comparison approach in the social sciences. In the 1930's the work of R.A. Fisher in statistical analysis procedures provided the final cornerstone for the development of a group comparison approach to statistical analysis. Inferential statistics allowed for the comparison of a wide group of individual case studies in a group analysis. This trend has held sway in the social sciences since the 1930's, and the investigation of single cases or case studies lost support during this point in time.

Fisher (1925) worked out the properties of statistical tests, which made it possible to estimate the relevance of data from one small group with certain characteristics to the universe of individuals with those characteristics. In other words, inference is made from the sample to the population. ... This type of estimation, however, was based on appropriate statistics, averages, and inter-subject variability in the sample, which further reinforced the group comparison approach in basic research.

The authors, however, go on to explore some of the limitations of the now prevalent experimental research design and group comparison approach to data analysis. Their aim is to demonstrate that single-subject design can overcome a number of these particular research problems and still provide reasonably reliable and valid research findings. As a result they are attempting to demonstrate how single-subject design is an acceptable method of social research as opposed to the trend that has developed over the past century from the beginnings of group comparisons.

Essentially the authors are reacting to the trend in the social sciences to view experimental design as the only acceptable mode of scientific research. They believe that this particular approach to social research has created problems for social research. As a result they review a number of those problems while at the same time demonstrating how single-subject design can overcome some of the objections that they raise regarding traditional methods of social research and data analysis in the human sciences field.

One of the first limitations of the group comparison approach that the authors describe is the question of the use of control groups for comparative statistical analysis. The control group is obviously used as a means of comparing treated and untreated groups of subjects so that the researcher can conclude that the treated group changed on the studied dimension as a result of the treatment since the control group remained constant. There is, however, the problem of ethical objections to this type of experimental

design and data analysis. The authors note that in the traditional experimental research design and group comparison approach, the requirement to have a control group necessitates one group not receiving treatment while another group is treated. This is the only way that a group comparison can be made between treated groups and the group that has not received the experimental treatment. The obvious ethical question is the right of the experimenter to withhold a treatment that may be effective in assisting the individual with his problems.

Despite the seeming illogic of this ethical objection, in practice many clinicians and other professional personnel react with distaste at withholding some treatment, however inadequate, from a group of clients who are undergoing significant human suffering.¹⁴

While there are other non-experimental designs which make it possible for researchers to make comparisons between groups, the authors essentially feel that the recent trend in the social science field has cast a shadow of doubt over these lesser types of research design. Consequently the striving for the experimental control group approach to research has overridden the use of other designs which may be more acceptable in terms of some of the ethical objections to traditional research design. Single-case experimental design is in fact one of these other methods, the authors feel.

In addition to the ethical problems that traditional research design has posed for the social sciences, there are practical problems. First there is the difficulty of collecting a large number of clients who have homogenous difficulties on which a comparison may be based. In other words, the researcher who is planning to make a group comparison analysis of one problem must find a number of individuals who share the problem and have common or related backgrounds that led to the creation of the problem. The basis of comparison between treated and control groups is that the population being compared from these two groups are essentially equivalent. In the study of human behaviour, the matching of these two groups becomes an enormously complex task. Here the social researcher is faced with the difficulty of finding individuals whose backgrounds, families and life experiences can be reasonably matched to enable the researcher to state that the control and experimental groups are essentially equivalent. If the researcher is able to collect this group of individuals who can be divided into control and experimental groups, he will be able to make a generalized comparison between his treated group and the individuals in the control group who are suffering the same problem. The finding of such a group creates an enormous task and problem for the researcher who wishes to use experimental design. Finding this homogenous group is difficult. The use of randomization deals with the problem of sample bias, but does nothing to reduce within sample variations. As a result, statistical generalization emerging from most social science experiments have very large error terms.

The obvious advantages of single-subject research design is that it resolves the two problems of control groups and the ethical issues that this raises and the finding of homogenous groups. In single-subject

designs, the individual is the subject of research. In addition, the individual serves as both control group and comparison group. As a result the researcher is not faced with the problem of withholding treatment to the individual nor is he faced with the problem of collecting a large group of individuals which can be divided into his control and experimental groups.

This introduces the third problem that group comparison analysis creates, which is the question of generalizability of research results.

Furthermore, as groups become more homogenous, which most researchers agree is a necessary condition to answer specific questions about the effects of therapy, one loses the ability to make inferential statements to the population of patients with a particular disorder since the individual complexities in the population will not have been adequately sampled.¹⁵

As a result, the researcher who wishes to make a comparison between his study group and the general population faces the difficulty that he may develop a sample which is too specific. This sample may not be comparable to the general population because it is so specific or, if the group is less homogenous, the researcher faces the problem of being able to generalize the results of his findings.

Once again, single-subject research does not face the problem of generalizing its results to the general population. Single-subject design is not

specifically interested in making general statements that are applicable to the population as a whole. However, the authors feel that single-subject design can contribute towards the development of knowledge in the social or human science field. The authors feel that the analysis of the individual case or the study of individual behaviour provides treatment for the individual. On the other hand, the social science researcher can use the multitude of single-subject research design as a basis for developing theory in the human sciences. Essentially what the authors are arguing is a return to the study of individuals in the social sciences as a means of gradually building the bases for more elaborate theories. The social sciences are at the initial stages of theory development much like the sciences of physiology and biology were in the 1830's when researchers studied individuals and made generalizations from individual behaviour to more complex theoretical explanations of those behaviours.

The fourth problem that the authors cite is the averaging of results. They note that by averaging the results for a large group of individuals, significant individual differences for the clients disappear in the averaging process. Thus, important findings may remain obscured because the results have been averaged. This is particularly significant when it is realized that a group comparison approach might demonstrate that clients are making some progress in treatment, but that some are also regressing. The averaging approach of statistical analysis loses the ability to examine the reasons for some individuals of improving and some degenerating.

That is, some patients will improve and others will not. The average response, however, will not represent the performance of any individual in the group.¹⁶

The final argument that the authors develop with regard to the problems of group statistical comparisons is the problem of inter-subject variability. This particular problem refers to the differences between individuals which comprise the study group. Because the subjects being studied vary in the degree to which they improve, the extreme improvements and the extreme cases where improvement does not occur end up creating weak or poor showings for the effectiveness of treatment. This is important in that the group statistical comparison approach cannot identify specific reasons for specific individuals improving or deteriorating. As a result, a treatment program which may have significant clinical implications could be discredited because the results that it has shown by averaging the improvement of its client appear to be weak or not significant.

As a result, the authors argue that the obvious alternative to group comparison studies is single-subject or single-case analysis. The problems cited in the group comparison analysis led researchers back to a study of the individual.

Essentially, Bergin and Strupp advised against investigating further effort in process and outcome studies and proposed the experimental single-case approach for the purpose of isolating mechanisms of change in the therapeutic process. Isolation of these mechanisms of change

would then be followed by construction of new procedures based on a combination of variables whose effectiveness was demonstrated in single-case experiments.¹⁷

The authors argue that researchers were then forced to go back to the individual as a means of building an understanding of case work or practice effectiveness for individuals. On the basis of outcomes of these individual cases, researchers could establish hypotheses about the types of treatment that are effective in assisting individuals in improving their social functioning.

In their book the authors are essentially encouraging social researchers to return to the study of the individual. They are arguing that the single-subject design can overcome a number of the practical problems presented by the traditional experimental research design. In addition, they feel that single-subject designs can be used for developing theories in the social sciences.

One of the more important functions of the case study is the generation of new hypotheses, which later may be subjected to more rigorous experimental scrutiny. Lazarus and Davison (1971) also agree with Dukes (1965) that the case study can occasionally be used to shed some light on extremely rare phenomenon or to cast doubt on well-established theoretical assumptions.¹⁸

The authors also note that Campbell and Stanley propose a number of re-search designs which they termed quasi experimental. The authors state that two of these particular types of research design are appropriate to

single-case studies or to the studies of the individual. They feel that the time series design and the equivalent time series designs are both acceptable single-subject designs. As a result it will be worth examining these two particular designs in the literature review section of the data analysis section of this research project. The basic argument, however, is that repeated measurement of the same individual will record changes in behaviour that may be assumed to be the result of the experimental treatment. While the authors note that simple time series experiments have difficulty demonstrating that changes in behaviour are a direct result of the therapeutic intervention, they argue that the second type of design, equivalent time series design which they describe, can overcome this difficulty.

While the inclusion of a base line is a distinct methodological improvement, this design is basically correlational in nature and is unable to isolate effects of therapeutic mechanisms or establish cause - effect relationships.¹⁹

The authors feel that they can provide improved time series designs that will overcome the difficulty of demonstrating the direct cause - effect relationship and will not create any of the problems that traditional research experimental design has created for the social science field.

As indicated earlier, the decision to analyze the data at a single-case level resolved a number of problems for this particular research project. In reviewing the evaluation project that Children's Foundation developed, this researcher quickly recognized that analyzing their data would run into the controversy relating to experimental design approaches to research.

Essentially the data that Children's Foundation had collected over the past years of operation of their evaluation program was on the treated group. While the evaluator in designing his program had run an initial test on the validity of his questionnaires, he had not established a control group in the agency to which the data that staff had collected could be compared. Consequently, by agreeing to analyze the Children's Foundation data, this researcher was faced with the problem of developing a new method of approaching this data. Since an experimental design was not feasible, an analysis at the single-subject level offered the most opportune method for approaching this data. In addition single-subject design did not create problems of generating control groups or the necessity of being able to develop generalized theories about the outcome of the cases. Consequently single-subject analysis offered this researcher the most advantageous method of analyzing the data for Children's Foundation.

As a result of the arguments presented by Hersen and Barlow, this researcher opted for a single-case analysis of the Children's Foundation data using repeated measures on the many variables for each subject. This particular approach provides the Foundation with a richer source of information and resolves many of the difficulties presented where more rigorous research designs require the use of control groups for comparison. The single-case analysis, thus, provided the second major focus of this research project, which was to analyze the data that Children's Foundation staff had collected over the last few years.

The analysis of this data will provide the Children's Foundation with feedback on the results of its program. This should be useful to the

Foundation in further developing its evaluation project and in also providing some initial feedback to the Foundation on specific cases and their outcome during the treatment process.. In addition, the arguments provided in the literature review of this chapter will provide the Children's Foundation with support for the method in which they are collecting data and some guidance for them in analyzing this data.

Thus, from the book on single-case experimental designs, and from the two articles on coded recording systems and the concepts of loss and change, this research project developed its format. Initially, it involves the study of the introduction and impact of program evaluation on an agency. Secondly, it examines the results of an evaluation project and the implications of the findings of this project to the treatment provided at the agency. Finally it is hoped that this research project will be able to provide the agency with new insight into its program evaluation project and with a new method of analyzing the data that it has been collecting.

FOOTNOTESCHAPTER 1

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CHAPTER 11

THE CHILDREN'S FOUNDATION - 1977 TO PRESENT

The agency which is the focus of this research study is the Children's Foundation. It is a residential treatment facility located in Vancouver, British Columbia, which provides residential treatment for behaviourally disturbed children between the ages of six and twelve. The Foundation uses behaviour modification techniques, based loosely on the work of Gerald R. Patterson, to assist children and families in altering their behaviour patterns. The focus of treatment is to assist children in changing their behaviour patterns from socially unacceptable behaviours to socially more acceptable ones.

Since the Children's Foundation has adopted behaviour modification as its treatment philosophy, it will be worthwhile examining the work of Patterson et al later in this chapter. However, it is worth commenting briefly on a few of the points involved in behaviour modification that the Foundation

uses in working with families. First of all the Children's Foundation believes in contracting with children and families to encourage children to change their behaviour from problematic, anti-social behaviours, such as disruptiveness in school, disobedience at parents' requests, etcetera, to socially more acceptable ones. The process of contracting used at Children's Foundation involves writing a contract with the child whereby the child earns points or stars towards a desired goal in exchange for demonstrating acceptable behaviour while in residence at the Foundation. Through this process of contracting with the child, the child has a clear understanding of how he is able to earn specific goals such as a trip to MacDonald's by demonstrating acceptable behaviour. In addition the Children's Foundation works towards developing a peer culture in each of the cottages. This peer culture can be used to reinforce and encourage acceptable behaviour. Through setting a goal for the entire group in residence it is possible to encourage each of the children in the group to work towards a specific goal or task. For example, the cottage may have decided that they wish to go to MacDonald's on a particular evening during the week. As a result, staff will set a specific number of points required by the group to visit MacDonald's. Then each child will work conscientiously towards this particular goal and will learn that through exchanging appropriate and acceptable behaviour in the Foundation that desired rewards can be obtained. Thus, the child learns through a process of demonstrating acceptable behaviour that he is able to achieve some

of his goals. In addition, the staff at Children's Foundation meet with parents on a weekly basis to provide them with some of the background philosophy and techniques in using behaviour modification. The purpose of the weekly meetings with family counsellors is to provide parents with some of the skills necessary to use behaviour modification techniques with their children. Thus, the staff at Children's Foundation work in two directions at once. First of all they work with the child who is in residence, helping the child learn more appropriate methods of obtaining his particular wishes. Through the demonstration of appropriate behaviours the child learns that he can obtain some of the objectives that he sets for himself. In addition, the Children's Foundation works with parents to teach them the techniques of behaviour modification which they can apply in living with their children and in encouraging their children to behave more appropriately.

The Foundation operates three cottages with a total capacity for twenty-four children with two emergency beds. Two of the cottages work with children ages six to twelve and accept referrals from the Vancouver area. The third cottage works with older adolescents up to age seventeen and accepts referrals mainly from the Burnaby and New Westminster areas of the Lower Mainland. The

Foundation works with these children and their families for varying lengths of time. The average length of time that a child spends in residence at the Foundation is eight months, but this can vary from three to twelve months, depending upon how quickly the family and the child learn new ways of relating to one another. The Foundation allows the child to go home every weekend. These visits enable the family and the child to test their new patterns of behaviour which they have learned at the Foundation.

Part of any evaluative study involves the determination of the degree to which the stated goals of the agency are being fulfilled. Consequently, the examination of Children's Foundation must include an examination of its stated goals. The statement of these goals is provided in a number of agency documents. A pamphlet entitled "For Parents" provides parents with an outline of the services and goals of the agency. The Children's Foundation Constitution provides a statement of the agency's mandate. The union contract and job descriptions for each position at Children's Foundation provide further information about the daily functioning of the agency. Finally, "The Children's Foundation Cottage Manual", which was written in April, 1978, provides an outline of the basic components of the program at the Foundation. All of these documents provide good insight into the routine operations of the program at the Foundation and its stated goals.

The pamphlet "For Parents" provides a useful starting point for examining the program at Children's Foundation. It states that staff at the

Foundation work "to help children and families to live together more successfully".¹ The pamphlet indicates that not only children but parents and other family members will often be required to look at their own attitudes and feelings and perhaps to make changes in these attitudes and feelings in order to facilitate the family living together again. From this particular philosophic statement of purpose the pamphlet goes on to describe the program at the Foundation.

The pamphlet indicates that the Foundation is, in fact, a private, non-profit organization that is run by a board of governors that is composed of community representatives. In addition, it indicates that major funding for the Foundation comes from the Provincial Ministry of Human Resources with supplemental grants from other community agencies and private individuals. It states that the Foundation is a "residential treatment centre for behavioural disorders in children".² As well as its Residential programs, the pamphlet indicates that the Foundation also offers a program called Access. This program provides treatment for up to fifteen additional children who are still residing in the family home. The focus of the Access program is to provide family counselling in the home to prevent the necessity of the child coming into care. Here, family counsellors work with the family and the child on an outreach basis.

The Residential program is divided between three cottages which all have a capacity of eight beds. Each of the cottages has a cottage supervisor plus a treatment team of four trained child care counsellors. A family

counsellor is attached to each cottage and acts as a consultant in helping child care staff plan and implement the treatment program for the family and the child. In addition to these staff, the Foundation has additional support staff which includes night staff, houseparents, maintenance and cleaning staff, cooks, and administrative support staff.

The pamphlet continues by describing the role of the child care counsellors and the routine of the cottages. It indicates that the child care counsellor is responsible for seeing the child through the daily program of activities at the Foundation. The counsellors who work days ensure that children are dressed and up in time for breakfast, keep their rooms clean, perform their assigned chores during the day and attend school, either on site or in the community school. The afternoon child care counsellors supervise the after school and evening activities at the cottages. They provide outings, sports and craft activities. The pamphlet indicates that the routine at the Foundation is fairly structured so that each child knows what he should be doing at any time of the day.

By knowing what is expected, both the staff and the child find it much simpler to focus on the more unpredictable, most important factors of each individual child's day - his behaviour, his attitudes, his feelings.³

The pamphlet "For Parents" describes the Access program as a program that provides services to children and their families when the child is not resident in the Foundation. Children may be referred to this program either in lieu of residential treatment or at the conclusion of residential

treatment. The philosophy behind the Access program is to allow the family to "test their newly acquired knowledge and skills on a full time basis, while still having the support and the advice of their family counsellor".⁴ This program offers the family a follow up, supportive service once they leave the Foundation. It also provides some families with a preventive service designed to provide counselling and support for the family and the child outside the agency. As an extension of the Residential program, it allows the Foundation staff to provide families with additional support once the child begins to live at home on a full-time basis.

The referral process is also described in the pamphlet. The pamphlet indicates that while any individual may make a referral to the Foundation, all referrals are initially screened through the Provincial Ministry of Human Resources' office. A social worker at the local office is responsible for interviewing the referred family and child to obtain background information on the nature of the problem that has occasioned the referral. The social worker is able, on the basis of his knowledge of the program at the Children's Foundation, to make a decision about the appropriateness of the referral to the program. He may be able to provide the family with more appropriate community resources to help them deal with their family's problem. If the social worker feels that the child should be referred to the Children's Foundation, he is then able to explain the nature of the program at the Foundation to the family.

Once the Ministry of Human Resources' social worker completes the referral to the Foundation, the staff at Children's Foundation review the referral information to determine whether or not their services will be beneficial to the family. When the Foundation accepts the referral, parents are asked to contact the agency to arrange for a series of interviews. On the basis of these subsequent interviews the Foundation obtains additional information about the family and the child, and formulates a treatment plan for the family. The treatment plan is written up in the form of a contract which outlines the goals and purposes of the treatment plan.

As part of the treatment contract with the family the Foundation requests that the family remain actively involved in the treatment process. This may include a weekly family session with a counsellor at the Foundation. These sessions, which can last up to ninety minutes, are designed to work on problem solving techniques with the family and to explore new problem solving techniques with family members.

We believe that if one person in the family has a problem, all other members of the family share in that problem and can contribute to its resolution. Therefore, our overall goal will be to have the whole family living together in a more satisfying way. ... We believe that families should stay together and that parents should raise their own children. We will try to do everything we can to see that these goals are accomplished.⁵

Finally, the pamphlet "For Parents" indicates that once the Foundation has accepted the referral, signed a treatment contract with the family, then

the parents are asked to sign Non Ward Consent Forms with the Ministry of Human Resources. These consents must be signed prior to the child being admitted to the Foundation. The consent forms give the Ministry of Human Resources and the Children's Foundation the parents' permission to care for the child while the child is attending the Foundation program. It indicates that the consents can be terminated at any time by the parents, and that signing the consents does not involve any loss of guardianship rights by the parents. In addition, it indicates that parents may be required to contribute to the child's maintenance at the Foundation. It states that, while the Foundation is fully funded, the Ministry of Human Resources requires that parents, where they are able, contribute towards the cost of caring for their child.

"For Parents", thus, provides parents with an adequate outline of the services offered at the Foundation and the expectations that the Foundation has of parents. It indicates that parental participation is expected and that working with the family is part of the treatment process at the Foundation. It also provides parents with a description of the program at the Foundation.

In addition to this pamphlet, the Children's Foundation Constitution which was written June 23, 1977, supports a number of the explicitly stated goals found in the pamphlet. In fact, three of the five goals of the Foundation relate directly to the actual treatment philosophy of the Foundation. The goals obviously effect the treatment program for children and their families at the Foundation.

The first goal of the Foundation according to the Constitution is to provide treatment for "emotionally disturbed children and their families".⁶ The pamphlet "For Parents" adequately emphasizes this goal. It points out that the Foundation is a residential treatment centre for emotionally disturbed children. It also indicates that parents are expected to participate in the program at the Foundation. It gives a very clear statement of the belief that parents should raise their own children and that a focus of the program at the Foundation is to enable the child and the family to live together co-operatively. The pamphlet also emphasizes the role of family members in contributing to the problems of the family and in solving the family difficulties. With this as a clear statement of goal, it is obvious that families, where parents are unwilling to participate in treatment programs, are not likely to be accepted for treatment..

A second goal is the concept of integrating the services that the Foundation offers with other community services. While this goal is not specifically elaborated in the pamphlet "For Parents", the pamphlet does mention the involvement of the Ministry of Human Resources' social worker. In this context it indicates that "since the social worker has a good working knowledge of all resources, he or she will decide which program would be the best",⁷ for the child and family. This implies not only a decision about the Residential program or the Access program at the Foundation, but also a decision about whether the Foundation is even the best alternative. The social worker at Human Resources will have the final decision on whether or not a referral to the Foundation is appropriate. Other community resources might, in the judgment of the worker, be

more appropriate to the needs of the family and the child. The Foundation program as a result can be integrated into other services in the community through the selectivity of the referrals that the Ministry social worker makes to the Foundation. As a result, the Foundation represents part of a continuum of services to the family. It is obvious that the program at the Foundation does not wish to duplicate services that exist elsewhere in the community.

A second indication of the Foundation's desire to integrate their program with other community programs is addressed in the discussion of school attendance. Where children are suitable for regular school programs they are sent to a local community school rather than attending the Foundation's specialized classes. Hence, there is another attempt to integrate the child into as many regular programs as is possible. In addition the Foundation encourages the child to spend each weekend at home so that he continues to be integrated with both his family and his community.

A third treatment goal which the Foundation emphasizes describes the focus on developing "services and programs to assist emotionally disturbed children and their families to be an integral part of their communities".⁸ This role once again emphasizes the desire of the Foundation to work towards integrating families into their community. The purpose of treatment is obviously an attempt to enable the child to live in the community in a more constructive manner. The focus of the Access program is to attempt to maintain the child not only in his community but also in the family

home rather than have him removed and placed in the Residential program. Similarly, the Access program attempts to provide support for the family once the child leaves the Residential program. This again emphasizes the need for the child and the family to adjust to community living.

It is obvious that these stated goals when put together indicate the desire of the Foundation to work with families and children to enable them to live together in their community. The goals emphasize the focus of the Foundation as being family and community oriented. In addition, the goals provide a good basis for the underlying treatment philosophy of the Foundation.

Finally, two objectives stated in the Constitution relate to the training of staff for the treatment of emotionally disturbed children and to the conducting of research on all aspects of emotional disturbance in children. Both these goals have important ramifications to the ongoing functioning of the agency and its evaluation program. Significantly the training of personnel involves the training of students from community colleges and universities at the Foundation. It provides training for new staff in the field of behaviour modification and in residential treatment. The conducting of research is important for the evaluation program. With the agency mandate clearly indicating an interest in research, it is easy to justify the use of the agency for research purposes with the aim of providing and improving the services offered by the agency to disturbed children and their families. This provides the agency with the opportunity to seriously review its program, if it so desires, in an attempt to improve

the services it provides both its clients and its funding agencies.

The Children's Foundation "Cottage Manual" provides basic training for staff at the Foundation. It also outlines six broad principles which further stress the program's emphasis and direction towards integrating the family and the child in the community. Each of the principles expands upon the concepts of the family and community as significant to the child's life and as a concern of the treatment program at the Foundation.

1. The Children's Foundation perceives as its mandate the mediation of the significant systems in a child's life (i.e., family, school, peers and community); while providing for social training of the child, so he may interact more positively with these systems now and in the future.
2. Mediation is that work which assists each system to examine and to change where appropriate, its problem-solving skills and interactional processes, with the goal of providing mutual support to all of its members.
3. Social training is that activity which teaches the child ways of relating to his environment in a manner that provides self-enhancing feedback.
4. Within our culture, the family system and schools hold the primary responsibility for the development and socialization of children. All therapeutic intervention must attempt to support, not replace, these systems.
5. Residential care is a treatment service, not a placement resource. Since it involves total intervention in a child's life, it must only be considered after all less extreme therapeutic strategies have been exhausted.

6. The Children's Foundation holds itself accountable to its clientele and the community at large, for its continuing mandate and for the treatment processes it utilizes.⁹

These principles elaborate on many of the previously stated goals of the Foundation. The emphasis is placed on the child being able to interact with his life systems, such as family, community, etcetera, in a more positive way. In addition these principles emphasize the role that the Foundation has in working with these other systems in the child's life to help them change and adapt in the way that they interact with the child. These concepts represent a restatement of the principles which have already been examined in the pamphlet "For Parents". The propositions outline and support the concept that family members will be required to re-examine their patterns of behaviour and perhaps make changes in these patterns to enable the family to live together.

Finally, the union contract and job descriptions provide accurate descriptions of the roles and functions of each individual position within the structure of the Foundation. For example, the role of the family counsellor specifies seven specific duties that are assigned to that position. The first duty of the family counsellor is to "work with the families of children in the Residential or Access programs so as to enhance family functioning".¹⁰ The remaining six duties listed are primarily responsibilities of the family counsellors to maintain agency records on family conferences and family sessions, to develop an intervention and treatment

program, to involve other professionals and community agency staff where necessary, and to continue to communicate with the child while he is in residence. The job description again re-emphasizes the responsibility of the family counsellor to "maintain close co-operation and communication with other community agencies involved with the family".¹¹ Once again, the job description of the family counsellor re-emphasizes the stated goals and directions that the philosophy of the Children's Foundation has adopted as its mandate.

The job descriptions for Child Care Counsellor 1 and 11 reiterate many of the same points outlined as the responsibilities of the family counsellors. The job descriptions emphasize the maintenance of records for each child, the participation in family conferences, the maintenance of community liaison, the preparation of reports on the families, and work as a co-therapist with families when necessary. Two of the primary duties of the child care counsellors also emphasize the importance of working towards enhancing "peer and adult relationships"¹² both in the home and in the community. The focus is again on re-integrating the child into his community and his family.

Analysis of these agency documents, thus, provides a framework for the understanding of the role and functioning of Children's Foundation. While it is important to understand the mandate of the Foundation, it is equally important to examine its treatment philosophy, since both the agency mandate and the treatment philosophy affect the evaluation project at the Foundation. Consequently, it will be useful to examine some of

the basic premises of Gerald R. Patterson's book Families, which outlines social learning theory as a treatment modality. An examination of Patterson's work will make it possible to examine the Children's Foundation evaluation project in light of the literature on evaluation research. It will also be useful in understanding a number of the concepts that were developed by the evaluator in his attempts to measure progress in treatment for children at the Foundation.

In the introduction to his book, Patterson notes that family members "decide what behaviours to change. It is they who design the means of bringing it about".¹³ Consequently, Patterson envisions all family members being involved in any behaviour changes within the family. He argues both parents and children change over time. As parents and children interact, they change each other's behaviour. It is therefore possible to learn new behaviours and to change old behaviours which are disruptive to family life.

Much of our behaviour represents the outcome of what we have learned from other people. People teach people. ... These are social skills that are learned by observing and reacting to other people. "Social learning" is a term which describes this process.

In the social learning process both persons are changed. The changes are small but they tend to accumulate over time.¹⁴

The first concept that Patterson discusses in his book is the concept of reinforcement. He notes that human behaviour can be understood in terms

of an individual's attempt to maximize his pleasure or rewards in life and to minimize any pain which he suffers. Much of human behaviour is governed by the tendency to avoid pain. Patterson argues;

There are many things that can function as a reward, or "reinforcer", and they all have one thing in common. When a behaviour is followed by a reinforcer, the behaviour is strengthened. This means that the behaviour is more likely to occur again in the future".¹⁵

From this concept of reinforcement, Patterson goes on to argue that all behaviour is learned and can be reinforced or discouraged according to the interactions between individuals. Consequently, the process of changing behaviour must become a process of reinforcing behaviour that is desired, and punishing or not rewarding behaviour which is undesirable.

The rewards that are possible to use in social situations Patterson refers to as social reinforcers. By these he means support, approval, touching, smiling, kissing and many other types of social interaction between individuals. He argues that these are strong reinforcers and can encourage positive behaviour, but that many of these reinforcers may be required to change or reinforce desired behaviour.

Next, Patterson provides a brief description of the process through which individuals can change behaviour. He notes that it is important to realize that change in behaviour is a gradual process that will only occur if consistent reinforcement is given to the type of behaviour that is desired,

and consistent known non-reinforcement or punishment is given to the type of behaviour that is not desired. The first step in any plan to change behaviour Patterson describes as "observation and data collection".¹⁶ He notes that part of the observation and data collection is for the individual to examine behaviour as it occurs and to observe whether or not they are in some way reinforcing that behaviour. In reinforcing appropriate behaviour it is important that the reinforcer not be used as a preliminary step to criticism or punishment. Patterson states that in this type of situation the reinforcer becomes "a sugar coating for punishment".¹⁷

In planning our environment we will want to strengthen new behaviours so that they will occur more often. But part of the problem may also involve weakening already existing behaviours so they will occur less often. To weaken problem behaviours, you can use non-reinforcement or punishment, or reinforce something that will take the place of the problem behaviour.¹⁸

Patterson notes that it is particularly important to observe your own behaviour when reinforcing another person's behaviour. While it may appear that you are not reinforcing a child's helplessness, you may in fact reinforce his helpless behaviour by coming to his rescue. Thus it is important that you not reinforce the behaviour but that you allow the child to suffer the natural consequences of his helplessness. As an example, Patterson points out that if a child is slow in getting ready for school, then the child will be late for school several mornings and this would be a natural consequence for his tardiness in the morning. It is important, therefore, to develop a list of natural reinforcers which

can be used to reinforce positive or acceptable behaviour. The child who is tardy in the morning and arrives late at school can be deprived of one of his reinforcers when he arrives home, such as dessert in the evening or watching a particular T.V. show. In this way it is clear that the reinforcer is being provided for a specific behaviour which is acceptable and taken away for behaviour that is not acceptable.

It is important to recognize that there are two stages in this process of reinforcement. When the behaviour is occurring as desired it is important to then begin to reduce the amount of reinforcement that the child receives for his behaviour. Despite this gradual reduction of reinforcement, the behaviour will nonetheless continue. Occasional reinforcement for acceptable behaviour will support its durability. In addition, the individual must make sure that he is not supporting negative behaviour by being over-protective or by assisting the child who is playing helpless.

Patterson then goes on to describe what he terms "aversive stimuli". In this particular chapter, he elaborates on the concept of punishment. He notes that punishment can produce rapid behaviour change. However, punishment also reaps punishment, he argues.

... the individual who gives the most reinforcement receives the most reinforcement and that the person in the family who gives the most punishment receives the most punishment from other family members.¹⁹

As a result, the use of hitting or striking can result in similar punishment being returned to the parent. Patterson notes that this type of punishment also provides reinforcement for the parent. When the parent strikes the child to stop a particularly undesirable behaviour, the behaviour stops. The parent learns that hitting stops undesirable behaviour. The parent in fact is reinforced for hitting.

Patterson suggests that there are alternatives to some of the more aversive stimuli of punishments. He states that it is important to use punishment which is only mildly aversive. For example, he suggests that rather than use any sort of physical punishment, there are other types of punishment such as "time out".

If you decide to use punishment, stay calm. Catch the problem at its beginning, then use some mildly aversive natural consequence every time.²⁰

It is important to use reinforcement with punishment. When a parent decides to use punishment as a means of ending one type of behaviour, Patterson states, it is important to increase or consistently provide positive reinforcement for the type of behaviour that is desired. The time out concept involves removing the child from the particular environment in which he is being disruptive or troublesome, and providing him with time away from the group or away from the setting. This type of punishment can be used effectively in changing behaviour. In summarizing his chapter on aversive stimuli, Patterson notes the following:

You get what you receive:

to get more reinforcement, give more; and,
to get less punishment, give less.

If you decide to use punishment,
intervene early;
use mildly aversive consequences every time;
remain calm; and,
set up a program to reinforce competing
behaviours.²¹

It is therefore easy to see that the type of behaviour change program that Patterson describes is both systematic and consistent. It is important for family members who wish to change behaviour to maintain a consistent pattern of reinforcement and punishment. This consistent behaviour on the part of the parents will gradually produce changes in the child's behaviour and increase more socially acceptable behaviour while decreasing behaviour that is not acceptable.

Finally, Patterson goes on to describe "accidental training". This, he states, is a process whereby individuals may accidentally reinforce problem behaviour.

It is a paradox that sometimes we create reinforcement arrangements that train our close friends, members of our families, and others whom we love to display high rates of problem behaviours. We also set up reinforcements that strengthen problem behaviours in ourselves. Such programs are extremely effective, even though they are unplanned.²²

As an example, Patterson describes a situation that parents can easily get into when attempting to teach a child new behaviours. When a child fails

to perform the behaviour as specified, the parent may have the tendency to take over the behaviour for the child. Consequently, the child is trained to be incompetent. If he is competent and completes the behaviour he only has to continue to behave in that way. However, if the child learns that by being incompetent, responsibility for his duty or task will be taken away from him. The child has learned that incompetence pays. He is relieved of responsibility for performing tasks which normally he should be both able to and responsible for performing. As an example, the child can learn to be helpless, simply because each time he is helpless his parents rush to his support. This, then, is an example of accidental training.

Patterson describes a second type of accidental training which involves punishment behaviour. Parents can quickly learn that by using pain and punishment, behaviour will change. Consequently, they are accidentally reinforced in using punishment as a means of changing behaviour. As an example, Patterson notes that a wife can quickly drift into nagging her husband to perform certain responsibilities around the home. In addition, the husband or family can train the mother in the home to be a nag. As a result of her nagging, the children or husband may stay out of the home to avoid being nagged. While the nagging may occasionally achieve its objective, and duties may be performed, avoidance behaviour may tend to be the typical type of response to nagging. As a result the woman may find herself left alone more frequently, since members of her family are attempting to avoid her constant harassment or nagging. As a result, she is accidentally reinforcing behaviour that she does not want, i.e. the

absence of her family, by adopting a consistent pattern of nagging whenever they are around. In addition, the family is adopting a type of behaviour that they do not desire, i.e. being away from home as a means of coping with the wife's nagging. This type of behaviour is accidentally reinforcing each other's undesired behaviour.

Patterson goes on to describe what he terms "precision reinforcement". He notes that in changing behaviour it is important to reinforce behaviour that you like and reinforce it as soon as it occurs. When behaviour is not acceptable, then it should be ignored, Patterson argues. He describes a process called "shaping", in which it is possible to reinforce a child for starting a project and each step along the way towards completion of the project. In this way the child can be encouraged to initiate projects and to follow through on the completion of specific projects. As an example, Patterson describes a process by which you can encourage a child to start studying an hour a day. To request a child to study immediately an hour a day is a gigantic step for a child who does not study at all. Thus it is more acceptable to encourage the child to study perhaps five or ten minutes in the first few study sessions. The child can then be reinforced for studying this short period of time and gradually the length of time that the child studies can be increased. It is important that in the process of shaping, the parent decide the target goal and the steps that can be taken towards reaching that particular goal.

This process is called "shaping". It consists of two steps. First decide just what it is that you wish to bring about. Second,

decide on the steps necessary to arrive at this point and break them down into very small and specific units.²³

Through this very gradual process it will be possible to encourage the child to study an hour a day or perhaps even longer.

It is important in using reinforcement not to punish performance that is not perfect. In addition, it is important not to use bribes in attempting to encourage the child to complete tasks. Patterson notes that bribes tend to wear off and will not reinforce specific behaviour. It is important to initiate a proper program of positive reinforcement and as the child changes his behaviour to slowly phase out the program so that the child is performing the desired tasks at an acceptable level. It is important to provide occasional reinforcement and encouragement for the child as this ensures that behaviour will be maintained over a long period of time. As a final conclusion to his chapter on reinforcement Patterson notes that if "behaviour does not change, it is a bad program, not a bad child".²⁴

Patterson then describes the process through which a program of behaviour modification can be established. First, the parent must identify the problem behaviour and a suitable alternative behaviour that he wishes to reinforce. Then the parent must begin to establish a base line on the problem behaviour to determine how frequently it occurs and chart it. The purpose of establishing this base line is that the parent will be able to establish whether or not the undesired behaviour is in

fact decreasing when he begins to reinforce pro-social or acceptable behaviour. Through a process of charting it is encouraging for the parent to see that anti-social or undesirable behaviour is decreasing while acceptable behaviour is increasing. Consequently, it is important to identify for each problem behaviour an alternate acceptable behaviour that the parent wishes to reinforce.

Once the parent has identified the particular problem behaviour, it is useful to establish a contract with the child.

"Contract" means writing down the specific behaviours and reinforcing arrangements that are agreed upon by the persons involved. Writing such an agreement is a means of being specific, and it is also a commitment: a written agreement is likely to be brought out many times to solve disputes about what someone really said in the original agreement.

Just as a rule of thumb, the older the persons involved, the more important it is that the agreement be negotiated by both parties. In attempting to work out behaviour change agreements with adolescents or spouses, negotiation is mandatory.²⁵

This process of contracting is important to establishing any behaviour modification program. Patterson notes that the contracting will establish the basis for providing reward or for withholding rewards or reinforcement. On the basis of this contract, all parties understand exactly what will earn rewards and what will not. The contract can even be posted and used to keep tally of the specific behaviours and reinforcers agreed upon. In

fact, Patterson suggests that this is a useful means of keeping track of the specific improvements and changes in behaviour and establishing a reward system for acceptable behaviour. For older children, a specific chart or point system can be established to award points for acceptable behaviour and to apportion out the number of points required for a specific reward.

He then describes some alternatives that might be used when problem behaviour does not change. As a specific alternative he refers to "time out".

The term "time out" (TO) means time out from reinforcement. The young child is moved from a situation that is reinforcing problem behaviour to one that is not at all reinforcing. This arrangement has proven to be a most effective means of producing rapid decreases in the occurrence of problem behaviours.²⁶

Time out is perhaps the most useful type of non-reinforcement or punishment. The child is simply removed from the situation in which he is demonstrating problematic behaviour and placed in a non-stimulating environment, such as a washroom. The child is given a specific amount of time out, which Patterson suggests should be from three to five minutes, during which he is to reflect on his behaviour which resulted in the time out.

The importance of time out as opposed to physical punishment is that time out can be used in a non-emotional way. Physical punishment usually occurs in some sort of emotionally charged environment, and has an emotional

aftermath. Patterson states that to be effective, punishment should be mild. Time out offers that type of mild punishment. When the parent is resorting to time out, he can calm and pinpoint the specific problem behaviour that the child is being given time out for, and place the child in a dull, non-stimulating environment. This clearly will remove the child both from the environment which is stimulating his unacceptable behaviour and will also provide a punishment to the child which is not emotional or physical. As a result time out can be effectively used to provide punishment for the child without creating any physical danger to the child.

This represents a complete program by which parents can train children to change behaviour from anti-social or unacceptable behaviour to pro-social or acceptable behaviour. Social reinforcers can be used to encourage positive behaviour and time out can be used to deprive the child of stimulation when negative behaviour is being displayed. Through this process it is possible to have the child recognize behaviour which is unacceptable and work towards changing that to more acceptable forms of behaviour. The child is encouraged to make changes through social reinforcement. Specifically, contracts can be written out or schemes of awarding points for specific good behaviours or bad behaviours can establish a fair basis for monitoring behaviour and allotting reward and punishment. In this way the parent will be able to develop a systematic program of dealing with their child's specific problem behaviour and to ensure consistency in dealing with that behaviour.

In addition to his basic book Families, Patterson also provides additional information on behaviour training in his pamphlet "Professional Guide for Families and Living with Children". This particular pamphlet, Patterson writes, is designed to provide a supplement to individuals who are working with either of his books, Families or Living with Children. The pamphlet, in brief, presents a number of Patterson's previously presented arguments with regard to social learning theory and the method of intervening in social problem behaviour to change it.

He notes that social learning is an important concept in understanding an individual's behaviour. He states that society and families program behaviour and that this behaviour can be deprogramed or changed to social reinforcement or shaping behaviour.

The primary assumption is that many behaviours of family members can be changed by manipulating the reinforcing contingencies used by parents, siblings, teachers and peers.²⁷

Social learning assumes that both positive and negative behaviours are reinforced by members of the same family. As a result the process of changing behaviour is one of identifying the type of behaviour desired and the type of behaviour that must be changed. The next step is to work on reinforcing appropriate behaviour and discouraging inappropriate behaviour. Patterson states that in many instances where parents attempt to provide punishment for disruptive or anti-social behaviour they are, in fact, providing support or reinforcement for that type of behaviour. Consequently the role of the family therapist is to identify the dynamics involved in

disruptive behaviour and work towards providing families with methods of limiting or changing that behaviour without reinforcing it.

These findings suggest that in helping a child it will first be necessary to teach the people interacting with him to use more effective punishment for coercive behaviours and to stop reinforcing his deviant behaviour. It will also be necessary to train many of them to respond to socially adaptive behaviour.²⁸

In his pamphlet, Patterson emphasizes that observation must become the first step in developing any behaviour change program. He states that many adults or peers are unaware of how they respond to problem behaviour, and for this reason must be trained to observe not only their behaviour but the type of difficult or problem behaviour that the child is displaying. The parent is encouraged to develop a graph for keeping track of the frequency with which problem behaviour occurs and to specify the specific problem behaviours that the parent wishes to change.

Patterson adds an additional important concept to the social learning theory. He states that evidence has demonstrated that "generalization of the effects from successful treatment in one setting to another" do not occur. A child may be placed in the residential treatment centre and successfully trained to behave properly in that setting, but there is no guarantee that his behaviour will be maintained at home. Consequently Patterson states that three stages must be used to evaluate the effectiveness of family treatment. First, the child must be observed in the home.

Second, the parents must be encouraged to report daily or keep track of daily behaviour in the home. Finally, the parents should be encouraged to develop ratings of the problem behaviour.

In reviewing the number of the studies conducted on social learning theory and its application to particular problems, Patterson notes that reasonable success rates have been documented. As a result, it is important to recognize that social learning theory can be successful in treating problem behaviours. However, Patterson suggests that the training must include parents and siblings in developing a home training or supportive environment which will assist the child in maintaining his newly acquired behaviour.

One of the key ideas in this approach to working with children is that people in daily contact with the child are the ones to be trained. ... It is they who can most efficiently "change the behaviour" of the child; it is also these people whose interactions will determine what the long term effects of any intervention program are likely to be. For this reason it is the task of the professional to teach the principles and techniques to the key people in the life of the child.²⁹

The implications of Patterson's work on the research project and on the evaluation project at Children's Foundation are numerous. First, his work suggests that the process of behaviour change must include the significant adults and children in the child's life and involve them in a process of developing a behaviour change program. In addition, it

suggests that follow up in the child's home after discharge is important if the changed behaviour is to be maintained. Consequently, the role of the Children's Foundation must be to assist parents in dealing with the child by assisting them in learning behaviour change techniques. In addition, the daily monitoring of the child when he is at home on week-ends is important. The parents' reportings of their experience of the child's behaviour once he is in a behaviour modification residence are also important. The parents must be encouraged to monitor behaviour and document how they respond to particular problem behaviour. They must also develop more appropriate ways to respond to that behaviour. Parents must learn to reinforce pro-social behaviour and to not inadvertently reinforce anti-social or unacceptable behaviour.

A final pamphlet which is useful in helping to develop an understanding of the program evaluation project at Children's Foundation is a pamphlet published under the signature of John Noble, Executive Director, Social Services and Income Security Programs with the Ministry of Human Resources. This pamphlet entitled "Guidelines for Measuring Progress in Treatment Programs" was published to outline the need for evaluation programs in residential treatment centres.

The purpose of this brochure is to help agencies involved in the treatment of children and adolescents develop the information that will enable them to improve their program performance. It is our opinion that this purpose is best served by agencies evaluating their own performance in order to maximize those aspects of their program that are

working best, while identifying those aspects which require improvement or revamping.³⁰

The pamphlet goes on to support the need for evaluation in residential treatment facilities. It notes that it is important that programs be able to demonstrate their effectiveness, to improve areas of their program that require improvement and to document areas of their program that are doing well. One of the important objectives of program evaluation that the pamphlet emphasizes is that the program will always be aware of its goals or objectives by constantly reviewing its program through an evaluation technique. The pamphlet does note, however, that it is important to measure the success of any treatment program based on predetermined treatment goals for each child.

It is more appropriate to describe a program or individual's relative success or failure in terms of their changes towards some realistic, pre-established treatment goal, based on the youngster's history, individual and social resources.³¹

By using this basis for establishing the effectiveness of a program, the brochure states that it is possible to measure the degree to which the program is meeting the specific needs of a specific child.

The brochure suggests seven steps that should be used in developing a treatment program for a child. First, the program should develop a list of program goals and agency goals. These program goals must be stated in terms of specific goals for the child or the client attending the agency.

Second, in developing this list of goals, the brochure notes that the goals must be specific and objective. By being specific it is possible to measure the degree to which the goal is achieved, whereas more general goals leave room for argument about the degree of completion. By being objective, it is possible to maintain a clear sense of exactly what the goal is and the value of obtaining that goal. The third step in maintaining or documenting the progress towards specific goals is to describe the methods of intervention that will be used to reach that goal. For example, behaviour modification techniques might be used in helping a family deal with a particularly aggressive child. The next step in the process of specifying goals is in fact a step towards the development of a goal attainment scaling system. The brochure suggests that goals be arranged in terms of levels of attainment so that it is possible to measure the degree to which the individual moves towards or away from a desired goal. The fifth step suggests that goals be rated in terms of importance, which is a step towards developing a quantitative measure of the success of the treatment program. Next, the goals and interventive methods should be set for a relatively short time period and then reviewed by staff. This will encourage staff to keep track of progress towards the goals and to review the techniques being used to ensure that they are in fact the most valuable or useful techniques in developing the specific goal. Finally, the pamphlet notes that the results of this process of monitoring the child's development or improvement in the treatment program should be relevant to the child's worker as well as the child, his family and the agency itself.

Accordingly, to maintain communication and ensure that different levels of agency operation have the same goals, it is important that everybody involved in the program from top administrators to on-line workers be involved in the determination of the major institutional goals, when and how progress shall be evaluated and how the program will make use of the information obtained from the evaluation process.³²

The brochure suggests a process by which an agency may develop a technique of monitoring its goal attainment in a fashion that is both specific and clear. It encourages agencies to review their programs in terms of their successes in reaching specific and desired goals. While it suggests goal attainment scaling as a method by which agencies evaluate their effectiveness in providing treatment, the pamphlet addresses the overall issue of accountability for services to clients.

As a final preparation for this research project, this researcher interviewed one of the Children's Foundation's family counsellors. This interview provides an outline of the typical contacts that a family might have with the Children's Foundation. It gives better understanding of the procedures as they now exist at the Children's

Foundation, and the nature of the contacts that families have with staff at the Foundation.

The first direct contact that a family has with the Foundation normally is with one of the family counsellors. At present, the family counsellors provide family counselling services, intake and follow up services for all families at the Children's Foundation. Originally the family counsellors were attached to the cottages at the Foundation, but since the initiation of the evaluation project in 1977 the counsellors have been transferred from the cottages to the family team at Children's Foundation. As a member of the family team, the family counsellor provides many of the direct counselling services to the family.

When the family first comes to the Children's Foundation, they know that a referral has been made to the Children's Foundation by their Ministry of Human Resources' social worker. As a result the family arrives ready to discuss with the family counsellor the nature of the program at Children's Foundation and the role that the parents will play in working with the Children's Foundation staff and with their child. In some cases the families may have already received a tour of the Children's Foundation. When the family arrives at the family counsellor's office, they are provided information about the Children's Foundation and about the work that

the Foundation does with families and children.

In this initial interview, the family counsellor, in addition to providing the family with information about Children's Foundation, discusses the nature of the problems that the family is experiencing with their child. In this interview, the family counsellor also asks the parents to complete the first probe for the Foundation. Parents are told that the questionnaires form part of an ongoing research project at the Foundation. In addition, the family counsellor emphasizes that the probes are used as a means of giving the Foundation feedback on the services they provide families. The family is also told that the probes provide the Children's Foundation with a means of establishing how the Foundation is doing with the family during the time that the family is working with the staff at the Foundation.

As part of this interview, the family counsellor provides a tour, or in some cases a second tour, of the Children's Foundation. On this tour the family counsellor is able to identify the key worker, or child care counsellor in the cottage who will be working with the child, and is also able to identify which room or bed will be the child's.

During the first interview with the family, the family counsellor spends a great deal of time stressing the importance of family involvement in the Children's Foundation program. He emphasizes that it is important for the family to be involved in the treatment process since the problem belongs both to the child and the family. The parents are advised during this interview that the child will be coming home each weekend so that parents will continue to assume responsibility for their child on the weekend.

In preparation for the first interview with the family, the family counsellor reviews the referral information from the Ministry of Human Resources' social worker. As a result, he will be aware of some of the problems that the family has identified in the child. The referral information will also be provided to the key worker in the cottage. At this interview, the family counsellor will be able to emphasize that the key worker should be contacted on any day to day concerns or issues that the family has about the child. On the other hand, the family counsellor will emphasize his role in meeting with the family at least once a week to provide counselling and parent training for parents.

An important part of the first contact that the family has with the agency is the introduction of the evaluation project. The family counsellor emphasizes that the research project is important to help Children's Foundation evaluate its program. He outlines that the parents will be asked to complete a number of questionnaires at specific times during their contact with the agency. He encourages families to complete the probes separately, and emphasizes that it is important for each parent to provide his or her perceptions of the difficulties that they are experiencing with the child. In addition, the family counsellor emphasizes that there are no correct answers to the questions, but that the main concern of the Foundation is to obtain information on the parents' perceptions of the difficulties they have with the child. He explains that the questionnaires are confidential and that should the parents wish to have information about the results of the questionnaire, the family counsellor will be able to provide this feedback in a general way to both parents or in specific to each parent on his or her responses to the questionnaire.

During the interview with the family counsellor, this researcher learned that the family counsellor has not had difficulty in having families complete the questionnaires. The counsellor stated that families seemed to accept completing the questionnaires as part of the routine format of working with the Children's Foundation. He states that he has, however, encountered situations where languages or cultural barriers have created difficulties for individuals in completing the questionnaires. He stated that normally the questionnaires take approximately one hour for families to complete and that he normally advises families of this. However, the particular counsellor who was interviewed has encountered situations where it took from fifteen minutes to three hours of work for an individual to complete the questionnaire. In these types of situations he has noticed some difficulty with language or cultural differences.

Another important part of the initial interview with families is the explanation that the family counsellor provides the family regarding the program at Children's Foundation. He emphasizes that the Children's Foundation is not a Ministry of Human Resources' service. While the Foundation is funded through the Ministry of Human Resources and other community grants, the Foundation runs its operation independently of the Ministry of Human Resources. In addition the family counsellor emphasizes that the role of the Children's Foundation is to work with the family, not just the child.

At this point in the interview with the family, the family counsellor explains behaviour modification techniques that the Children's Foundation uses in working with families. He also explains the Access program which

involves follow up from the Children's Foundation when the child has been discharged from the program. The Access program will last from anywhere from two months up to a year, as necessary for each family. During this time period it is important for the family to know that they are not abandoned by the Children's Foundation, and are being provided with continuous support through contact with the family counsellor at Children's Foundation. During the Access program the family counsellor will continue to meet with the family weekly or perhaps bi-weekly to provide ongoing support and training for the parents. The Access program, however, may occur in the parents' home or at the agency.

The family counsellor indicated that a frequent question is the length of stay that the child will be at the Foundation. Parents frequently are interested in how long their child will be in care and living at Children's Foundation. To these specific questions, the family counsellor indicates that the average stay for a child is eight months to a year, but that some children stay longer and some leave earlier, depending on how quickly the family and child can learn new behaviours.

Once the child is in residence the family continues to have contact with the family counsellor on an almost weekly basis. During these weekly sessions the family counsellor concentrates on teaching the parents the basic principles of behaviour modification and on demonstrating how these principles can be used to modify a child's behaviour. When the child is ready to be discharged and sent home and the family is ready to be transferred to the Access program, the family counsellor arranges for the completion of the second probe. Consequently the first and second probes in

the evaluation project are completed in conjunction with contact with one of the family counsellors at Children's Foundation.

When a child is formally discharged from the Access program, the final two probes are mailed to the family. The third probe is mailed at the point of discharge and is designed to measure the parents' perceptions of their child's behaviour at discharge. The fourth and final probe is mailed six months after the discharge probe and is designed to follow up on the parents' perceptions of the child's behaviour and the degree to which the family and the child are able to maintain their new behaviours. This provides the Children's Foundation with a measure of the degree to which behaviour is generalized and maintained after discharge from the Foundation.

Part of the family counsellor's introduction to the agency is also to answer some of the specific questions about what the child needs at the agency. The family counsellor can provide the family with a list of clothing that is required for the child and explain that Children's Foundation will maintain the clothing at an appropriate level during the child's residence at the Foundation. In the interim, however, the family is asked to provide either good or new clothing for the child so that when he comes to Children's Foundation he has some good clothing to start with. Once the child is admitted, the Children's Foundation will maintain the clothing in a good state of repair and will ensure that he has good clothing when he is discharged from the program. The family counsellor also encourages families who are on income assistance to approach their social worker for assistance in buying the necessary clothing for the child. This will ensure that the child comes to Children's Foundation with an adequate supply of

clothing which can be maintained or replaced as necessary during the child's residence at Children's Foundation.

As a final point of discussion in the initial interview, the Children's Foundation family counsellor re-emphasizes the rights of the parents in dealing with their child. Parents maintain all guardianship rights while the Children's Foundation has custody of the child. Consequently, parents can remove their child from the program or make other major life decisions for the child and do not lose those rights by signing an agreement with Children's Foundation. Children's Foundation is concerned only with providing care and custody for the child while working with the child to change his behaviour. The family counsellor might indicate that if the family decides to move its child suddenly, the Children's Foundation would be interested in knowing why the family is taking such drastic action. However, despite this interest in the reasons for the family terminating its contract with Children's Foundation, the family counsellor is able to emphasize that the family still has the right to remove the child from the Children's Foundation program. The fact that the family has signed an agreement to work with Children's Foundation, does not negate their rights to guardianship and custody of the child should they decide to exercise those rights.

As a result of this initial interview the family should have enough information to be able to decide that they will be able to work with Children's Foundation. In addition, the Children's Foundation is able to assess the degree to which their program is the appropriate resource for this particular family. Consequently, at the close of this interview, the Children's

Foundation family counsellor arranges for the family to sign an agreement to participate in the program at the Children's Foundation. The family has to sign an agreement called a Special Care Agreement with the Ministry of Human Resources' social worker. In addition, the family counsellor outlines the program at Children's Foundation sufficiently so that families are aware of their responsibilities in working with the Foundation and their role in working with their child in changing that particular child's behaviours.

As a result of this interview, it was possible to determine that the Children's Foundation follows to a reasonable degree the description provided by agency pamphlets. The intake procedure and the emphasis placed on the family's role in working with the Children's Foundation is emphasized during the initial intake interview. In addition, the family counsellor introduces the program evaluation project which should encourage parents to complete the forms accurately as part of the ongoing requirements of the agency program. While the particular family counsellor interviewed could not state that the process he described was exactly the same for all family counsellors, he assumed that this would be the normal process involved in admitting a child and family into the program at Children's Foundation. As a result of this interview the family should be well aware of its responsibilities in working with the Foundation.

FOOTNOTESCHAPTER II

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13. Gerald R. Patterson, Families. Research Press, Champaign, Illinois, 1971, p. 2
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CHAPTER III:

THE STAFF'S VIEW OF THE EVALUATION PROJECTA. Problem Definition

The readings on loss and change provided this research project with its first focus. That focus is to evaluate staff experiences of the introduction of program evaluation at Children's Foundation. To evaluate the staff experiences, this research project identified five variables which it would attempt to measure through a questionnaire. Each of the variables relates to staff involvement in the evaluation project and to their feelings as to the impact that evaluation had on their job at the Foundation. Three variables were adapted from an article by Edward M. Glaser and Thomas E. Backer, titled "Durability of Innovations: How Goal Attainment Scaling Programs Fare Over Time". The second two variables were developed specifically by this researcher, in an attempt to measure directly the feelings of staff of resistance or commitment to the evaluation project. At this point, it is worth examining each of these variables to demonstrate how they relate to the theme of program evaluation and its introduction into the agency.

The variables adopted from Glaser and Backer are discussion, involvement and need. In their article, the authors set out to examine a number of agencies that had attempted to use program evaluation techniques involving goal attainment scaling. The authors were interested in determining what factors might contribute to the survival of goal attainment scaling in an agency. To review the agencies that had attempted to use goal attainment scaling, the authors identified fifteen propositions from the literature that might explain the survival of goal attainment scaling programs. Of these fifteen propositions, seven were taken from the work of Seashore and Bowers, which related to the durability of innovations. The remaining eight factors were adopted from Howard Davis' "A Victory" model which identifies eight factors important to consider in predicting the outcomes of an agency change program. The three variable of discussion, involvement and need are worth discussing now as they are the particular variables that this researcher attempted to measure in the research questionnaire.

In an agency where there is discussion about an innovation, involvement in the development of the innovation, and a staff perception of the need for the innovation, the innovation is likely to be adopted and maintained. The authors state that these three factors positively contribute towards the maintenance of any innovation and, in particular, goal attainment scaling. This research project adopted these three variables as important variables to consider in understanding the development of the evaluation project. In addition to measuring these specific variables, responses from staff to these variable contribute towards a better

understanding of the degree to which staff were either resistive to or committed to the evaluation project as a whole.

For the purposes of this research project, the variable of discussion is defined as the "encouragement of open discussion by staff of problems and side effects of the change program".¹ Operationally, this is defined as staff responses to statements indicating their feelings that open discussions occurred. The evaluation project did involve staff in discussions about the purposes of the evaluation project and its goals. The attempt of this research project is to measure the degree to which staff at the Children's Foundation felt that these discussions were productive, or the degree to which the discussions were useful for staff in impacting and influencing the development of the evaluation project. Again, the responses of staff to the concept of discussion assists in understanding the degree to which staff were committed to, or resistive to, the evaluation project itself.

The second variable which is adopted from this article is the concept of involvement. Involvement is defined in the article as "staff involvement in participative decision making with regard to innovation adaptation and installation".² Operationally this is defined as the staff responses to statements indicating that they felt that they were involved in the adaptation of the evaluation project and the installation of the project in the agency. Once again, staff responses to this particular measure of their views of the evaluation project contributes towards the understanding of the degree to which they felt they were able

to commit themselves to the evaluation project at the agency.

Finally, the concept of need is defined as indications from staff that the project is "truly valuable and needed".³ Operationally again, staff responses to statements indicating a degree of support or a belief in the value of the project are measured by this research project. In their article, the authors emphasize that innovations are likely to persist where these variables are present. Thus, if staff feel the need for an innovation or are encouraged to discuss the development of a particular innovation, then that particular innovation has a good chance of surviving. Where, however, staff are not encouraged to participate or become involved in the development of an innovation in an agency, it is likely that the innovation will not survive.

This research project measures staff perceptions of the need for the program evaluation project, and their involvement in and discussion of the development of the project at the agency. Since the evaluation project has survived over a period of five years, the concepts that Glaser and Backer develop in this article to explain the durability of innovations are helpful in understanding how this particular project survived over time.

In addition to these three concepts, this researcher developed two specific concepts with relation to the development of the evaluation project. The concept of resistance is an attempt to measure staff resistance to the evaluation project. Resistance is defined as the "disinclination of staff to support or become involved in the evaluation project".⁴ Operationally, this variable is defined as staff responses to statements

indicating negative or positive feelings about the evaluation project.

A large number of negative feelings indicate a high degree of resistance to the evaluation project. On the contrary, a large number of positive feelings about the evaluation project indicate that staff are willing to support the project.

As a direct opposite to the concept of resistance, this researcher developed the concept of commitment, which is the willingness of staff to "make a commitment to the development of the evaluation project". Operationally this is defined as staff responses to statements indicating a willingness to be involved in the project and therefore a measure of commitment which indicates support of the evaluation project.

The variables of resistance and commitment relate directly to the concepts of loss and change. As indicated earlier in the discussion of Peter Marris' book, conservative impulses represent a resistance to any innovation, while the gradual process of assimilation of the change affects the degree of staff commitment to, involvement in and discussion of the evaluation project. Consequently, the five factors selected for study in this research project lead to an understanding of the successes and failures of the evaluator in involving staff members in the evaluation project at the agency. By measuring staff responses to these variables it is possible to assess the degree to which the evaluator was able to resolve some of the concerns that staff had about the evaluation project.

This research project also attempts to measure staff responses to a number of secondary hypotheses about how staff responded to the evaluation project.

1. Variable Degrees of Resistance

This researcher hypothesized that the degree of resistance to the evaluation project varied according to occupational group. This researcher felt that the child care staff at the agency would respond more negatively to the evaluation project than other staff, such as the supervisors or family counsellors. Since the evaluation project represented a new innovation in the operations of the agency, this researcher hypothesized that there would be a general feeling of resistance, or, at the very least, ambivalence to the introduction of the evaluation program. As a result, this researcher developed the following hypotheses related to resistance:

Hypothesis 1

The degree of resistance to the evaluation project varied according to occupational group.

Hypothesis 2

Child care staff at the agency responded more negatively to the evaluation project than other staff.

Hypothesis 3

Child care staff at the agency felt more threatened by the evaluation project.

Hypothesis 4

The introduction of program evaluation was met by general resistance from the staff.

Hypothesis 5

The staff at the Foundation expressed concerns with regards to the motivation for the evaluation project.

2. Varying Degrees of Commitment

This researcher, on the other hand, felt that the degree of commitment varied according to occupational role as well. As commitment is exactly the opposite dimension of resistance, some of the dynamics with regard to resistance also apply to the degree of commitment in the staff to the evaluation project. Consequently, this researcher developed the following hypotheses with regard to the concept of commitment:

Hypothesis 6

The degree of commitment to the evaluation project varied according to occupational group.

Hypothesis 7

The child care staff at the agency demonstrated less commitment to the evaluation project than other staff.

Hypothesis 8

The degree of commitment to the evaluation project was generally low among staff.

3. Effectiveness of Discussion

This researcher was also interested in measuring the level of discussion and the degree to which staff felt that the discussions about the evaluation project were positive in developing the evaluation program.

As a result, this researcher developed the following hypotheses about discussion:

Hypothesis 9

The degree to which staff felt that the discussions were useful varied according to occupational group.

Hypothesis 10

Child care staff felt less positive about the usefulness of the discussions about the evaluation project.

Hypothesis 11

The majority of staff did not feel that the discussions about the evaluation project were useful in resolving their concerns about the project.

4. Degree of Involvement

This researcher felt that staff had different perceptions of the degree to which they were involved in the development of the evaluation project. Consequently, this researcher developed a number of hypotheses to test the staff's sense of their involvement in the evaluation project. The following hypotheses were developed to measure the degree to which staff felt involved in the evaluation project:

Hypothesis 12

The degree of involvement in the evaluation project was perceived differently according to occupational group.

Hypothesis 13

The child care staff felt less involved in the evaluation project than other staff.

Hypothesis 14

The child care staff felt less able to influence the direction of the evaluation project than other staff.

5. Need for the Evaluation Project

This researcher felt that staff had different perceptions as to the need for the evaluation project. This researcher felt that staff perceptions about the need for the evaluation project or the value of its findings varied according to occupational group. As a result, this researcher developed the following hypotheses about the staff views on the need for the project:

Hypothesis 16

The staff perceptions as to the need for the evaluation project varied according to occupational group.

Hypothesis 17

The child care staff were less supportive of the need for the evaluation project.

6. Analysis over Time

This research project also attempts to explore staff perceptions about

the evaluation project approximately one year after the initiation of the project at the agency. In this connection, this research project presented staff with a series of quotes taken from a report which was written almost one year after the initiation of the evaluation project. On the basis of this report, this project attempts to measure staff feelings about the evaluation project after it had been in operation for almost a year. This researcher encouraged staff to recall how they felt about the evaluation project at the time that the agency evaluator wrote this second Progress Report on the implementation of the evaluation project at the agency. This research project then compares staff responses on the questionnaire prior to the introduction of this second progress report to those responses after the introduction of this report. This comparison indicates whether or not staff responses at these two points in time change significantly from one occupational group to another. To complete this comparison this researcher developed the following hypotheses:

Hypothesis 18

As the evaluation project developed, staff resistance to the project declined.

Hypothesis 19

As the evaluation project developed in the agency, staff commitment to the project increased.

Hypothesis 20

As the evaluation project developed, staff support for the need for the project increased.

Hypothesis 21

As the evaluation project developed, staff viewed their involvement in the project as increasing.

Hypothesis 22

Staff opinions about the evaluation project varied less by occupational group over time.

The survey of staff reactions, through the structured interviews, collects the data to test these hypotheses. Through the questionnaires this research project attempts to determine the impact that the evaluation project had on the staff and the degree to which the staff felt threatened by the project. The analysis of these tentative hypotheses makes it possible to determine the extent to which staff supported or resisted the evaluation project at the agency.

FOOTNOTESCHAPTER IIIA. Problem Definition

1. Edward M. Glaser and Thomas E. Backer, "Durability of Innovations: How Goal Attainment Scaling Programs Fare Over Time". Community Mental Health Journal, Vol. 16(2), Summer 1980, p. 132
2. IBID., p. 132
3. IBID., p. 132
4. IBID., p. 133

B. Design of Survey of Staff Reactions

The study of staff reactions assesses the impact that the introduction of program evaluation had on staff at the agency. The individual's concerned with the introduction of the program evaluation project and its potential impact included the administrators, supervisors, child care staff, and the program evaluator. This study examines the feelings that staff had about the implementation of the evaluation project.

Essentially the study adopts an exploratory approach to the problem of introducing change into an agency. It presents a number of hypotheses and defines a number of variables that are applicable to the introduction of an innovative project into an agency. (These hypotheses and variables have already been presented in the problem definition section of this chapter). The research project attempts to collect data to test these hypotheses. Through the testing of these hypotheses this project contributes towards an understanding of the impact that program evaluation has on different occupational groups in an agency. When the hypotheses and variables are examined together, this research project provides potential evaluators with

some understanding of the effects of their operations on an agency and its staff.

This survey hypothesizes that change in an agency affects different occupational groups to different degrees. It assumes that any individual may be threatened by change, but that in the case of an evaluation project, the degree to which an individual feels threatened varies according to his or her occupational group at the agency.

Since the survey of staff reactions is a retrospective study, and since it attempts to get staff at Children's Foundation to recall their experiences of up to five years previous, experimental control for intervening variables is impossible. This research project assumes that through the process of aided recall, staff will be able to remember their feelings about and experiences of the introduction of program evaluation at the agency. The method used in this project is based on Merton's Focused Interview. In this study, Merton suggests that individuals can be assisted in recalling their experiences through a focused interview.

The agency evaluator attempted to keep staff involved in the development of the evaluation project. To achieve this he prepared a number of progress reports for staff over the two year implementation phase of the evaluation project. This research report has the evaluator read back sections of these reports to staff. By re-reading these reports, and by encouraging staff to think back to the early years of the evaluation project, it should be possible to have staff recapture their experiences of the introduction of the evaluation project.

The staff interviews involve all staff members currently working at the Children's Foundation who were present during the initial introduction and discussion phases of the evaluation project. This includes approximately seventeen staff members who vary from child care workers to supervisors, clerical staff to teaching staff. In choosing this sample it is possible to get a cross-section view of staff experiences of the evaluation project. In addition this sample allows for the measurement of the perceptions and recollections of each occupational group at the agency. These perceptions and recollections provide insight into varying impressions about the impact that the evaluation project would have in the agency. In addition it provides insight into the degree to which individuals at the agency felt threatened by the project.

The data is gathered through group interviews in which staff are asked to respond to a series of statements ranked on a scale from one to five indicating strong agreement or strong disagreement with each statement. Each statement is designed to measure one of the five variables defined earlier in this report. Each statement also attempts to relate and to build on the preceding quotation from the evaluator. In addition, the quotes selected refer to a number of general issues that staff raised as they began to develop and work on the evaluation project. The statements ask staff to make judgments as to their feelings at the time the evaluation project was being implemented.

Approximately two thirds of the way through the questionnaire, staff are reminded of a later report completed by the evaluator in which staff concerns were named more specifically. This second report represents a significant

change in the evaluator's ability to state specific reasons for the evaluation project. While earlier papers vaguely discuss the concerns of follow up and feedback, this subsequent report clearly names specific issues that the evaluation project raised at the agency. Consequently staff are asked to respond more directly to some of the issues mentioned in this subsequent progress report. The responses to these questions on the evaluation project may provide some indication of a significant change in staff feelings about the evaluation project. It is useful information on the degree to which staff's attitudes to the evaluation project changed over time. From an initial stance of confusion, dissention or resistance, staff may demonstrate a significant change in attitude to be more supportive, enthusiastic and interested in the evaluation project. As a result, this research project attempts to make a comparison between the two times in the evaluation project and a comparison between staff attitudes at those separate times.

A number of questions in this research project also give the agency evaluator direct feedback on his effectiveness in diffusing some of the resistance of staff to the evaluation project. This is useful information for the agency evaluator. It contributes to an understanding of the basic issues that any evaluator faces in introducing significant changes into an agency's operations.

To measure staff responses to each of the five variables, this research project developed fifteen specific statements for each variable. The statements were then interspersed throughout the questionnaire in an attempt to prevent staff from becoming sensitized to specific variables being

measured. In addition to this interspersing of statements, the more negative statements about the evaluation project are mixed with more positive and supportive statements.

Since the sample is particularly small, a pre-test group was unavailable. The instrument was developed and presented to the administrator and the evaluator for their comments and suggestions. The administrator, in fact, completed the questionnaire as a single pre-test for wording, sequencing and controversial issues that may contribute to staff dissatisfaction with this research project. As a result of this single pre-test, the questionnaire was modified to its present form. The evaluator and administrator were asked to raise any issues with respect to the contents, clarity or appropriateness of the questions asked. Once this was done, the questionnaire was presented to the University's Committee on research ethics for consideration.

The problem for the survey of staff reactions is the lapse of time between the initial introduction of the evaluation project and the introduction of this research project. The question may be asked as to the degree that aided recall assists staff in remembering the feelings they had about the evaluation project. However, staff responses to the questionnaire still provide enlightening information on their feelings about program evaluation. Since the evaluator and the administrator both support this research project, staff may feel more comfortable in expressing any of their adverse reactions or concerns about the evaluation project that they felt unable to express some five years ago. In addition, this researcher asked one final question at the group interviews which was the degree to which staff felt the method of presentation assisted them in recalling their feelings.

This simple yes/no answer question attempts to measure the degree to which staff felt they were able to recall their exact feelings about the evaluation project. This research project may, in fact, provide feedback on specific concerns that were too difficult or too threatening to express when the project was first introduced to the agency.

While it is difficult to demonstrate accurately that those feelings presented now are the feelings of staff reflected in 1977, there is one additional check for validity that is possible. Aside from the consistency with which staff answer the questions on the questionnaire, this research project conducts a comparative analysis between staff responses to the questionnaires and a content analysis of the papers presented to staff by the evaluator. Through a careful analysis of the contents of these papers and a comparison with the data collected, it is possible to provide some reliability and validity checks on staff responses. In addition, the questionnaires have some validity checks within themselves to check the consistency with which staff are able to recall some of their specific feelings about the evaluation project.

C. Literature Review

An essential task in preparing for the survey of staff reactions at the agency is the review of the literature on evaluation research. Since evaluation research is a growing field, the literature available represents a broad spectrum of material from both practical and theoretical perspectives. Since the purpose of reviewing the literature on evaluation research is to provide a basis for understanding some of the difficulties that the evaluator faced in implementing the evaluation program at the Children's Foundation, this literature review focuses on the practical aspects of the evaluation research literature more directly.

As a prelude to this review of the literature, Frances Rick provides three articles which outline a number of specific issues that any evaluator must consider in developing an evaluation program. In her article "The Dynamics of Evaluation", which she presented to the British Columbia

Psychological Association in November, 1977, she outlines the process of evaluation. In it she describes evaluation as the "systematic collection of information which can and will be used for decision making".¹ She states that the concept of decision making is essential and central to evaluation projects. Organization-wide, province-wide, or ministry-wide, data collection systems are not evaluation programs. These type of systems are not designed to assist the decision making process. While they may provide interesting across population comparisons, Ricks argues that such comparisons do not constitute evaluation studies. These types of studies are not related to the decision making process or undertaken for the specific purpose of assisting the organization in its decision making. Consequently, it is imperative that the theme of providing information for decision making be considered in the design of evaluation study.

From this, Frances Ricks indicates that there are seven distinct stages in the evaluation process. The first stage involves the initial decision to evaluate the organization or program, or the "token buying-in" to an evaluation study. By this she refers to the response of an agency to the threat of its funding body or to the generalized concern of not being able to account for the operations of its program by buying-in to an evaluation study. This token buying-in represents for some organizations an original sin. Frances Ricks states that the second and third stages of an evaluation study that result from this token buying-in can have disastrous consequences for the organization. Typically the second stage involved in the evaluation process is the hiring of an evaluator who is instructed to design and to

implement an evaluation study of the organization. From this stage the evaluator follows his directions and produces an evaluation of the organization. The third stage relates to the implementation and presentation of the evaluation.

Unfortunately this series of events, Ricks states, does not meet the organization's needs. Once the evaluator presents the organization with his report, the organization is faced with a difficult decision. The organization frequently receives a report that does not meet its needs so that it is faced with the decision of hiring a new evaluator (who will really understand the needs of the organization) or with repeating the same three unsuccessful stages of the evaluation process. This first attempt to evaluate does not provide the organization with any useful information since it results from the token buying-in to the evaluation process. Consequently the evaluation that is produced from this series of events is not related to the decision making process and is therefore not useful to the organization.

Organizations generally learn from the first experience of evaluation so that the process is not repeated. As a result of the first experiences with evaluations, the organization and the staff are generally motivated towards asking the question, what do we really want from an evaluation? This is perhaps the first significant step in the evaluation process. The organization is now stimulated towards working out a finite definition of exactly what it wants to know about its operations. The evaluation study, thus, can be designed to answer some of the organization's questions about itself and can also assist the organization in making

decisions about its operations.

The first stage of the evaluation process should be the point where the staff and the organization decide to either opt in or out of an evaluation study. Once the decision is made to opt into an evaluation program, the organization can begin to define exactly what it is that it wants to learn from the evaluation. This is the first productive step in the evaluation program, Frances Ricks states, since it involves the organization in developing a definition of the goals of the evaluation program.

If you opt in, the next step in the process is to define what you want to know and how you will use the data. Going through this defining process usually requires some compromise. Because of your varied positions in the program or organization you often are interested in different questions and disagree about how the data will be used.²

This becomes the second stage in the evaluation process during which the definition of the evaluation program is developed. Frances Ricks states that the differences between staff in the organization can be negotiated out to represent the best solution for all parties involved. While this is the best possible solution to the problem of defining the evaluation program, she also notes that the definition of the evaluation program can be imposed on the organization by the senior administrators or an impasse can be reached which prevents the co-operative development of the evaluation's goals. Either of these two solutions can have negative effects on the evaluation program. It is therefore important at this stage of the

evaluation to negotiate and resolve the question regarding the final goals of the evaluation program. Through this negotiation process it will be possible for the organization and the staff to actively encourage and support the evaluation program.

With a clear definition of the evaluation goal, it is possible to move on to the third stage of the evaluation process which Ricks describes as assessing the "readiness for evaluation". Frances Ricks expands upon this particular concept of evaluation in her article "How to Get a Handle on Evaluation" and will be discussed in more detail later. However, it is important to note that at this third stage, the organization or the evaluator must ensure that the evaluation which is undertaken is appropriate to the stage of readiness of the organization for evaluation. Some organizations attempt very complex evaluation programs which have little hope of success simply because the data collection methods are not available or the information already available will not provide answers to the questions being asked.

When the organization decides to opt into an evaluation, defines the goals of the evaluation and assesses the readiness of the organization for an evaluation, it is possible to design the evaluation itself. Frances Ricks claims that this fourth stage in the evaluation process can be handled by any competent research technician. However, the trick at this stage of the evaluation process is to ensure that the evaluation system is collecting the information that is necessary to assist the decision making process. In other words, the evaluator must determine what measure,

if any, can be used to support or refute a decision that an organization is contemplating.

Frances Ricks states that the dangerous tendency at this particular stage of the evaluation process is that the organization will wait for the data to be collected prior to making any decisions or to planning any organizational goals. While this approach to data collection may seem reasonable, it can introduce conflict into the organization. Once the data has been collected it can become a political issue for the agency. The data can now be interpreted or misinterpreted by a number of factions within the organization to support a variety of decisions.

The trickiest problem at this point is not the design itself, but rather pre-determining how the data must look for what kind of decisions. More often this step is not taken until the data comes in - at which point the politicking begins.³

The danger lies in the fact that the data may support none of the factions in the organization since it was not specifically designed to provide information to assist those particular factional decisions. As a consequence the organization may end up basing many of its decisions on false or unreliable data that has been collected with no specific purpose in mind.

The next stage in the evaluation process that Frances Ricks states involves two steps. First the organization must decide who is going to do what and when. The evaluator must then ensure that the evaluation procedures are

as unobtrusive as possible so that they do not interfere with the daily operations of the organization. The evaluation can do this by adapting the data collection procedures to the routine operations of the organization. This will allow the organization to continue with its normal operations while collecting the necessary data for the evaluation. The importance of this point is that should the evaluation program cause serious disruptions of the normal operations of the organization it will be impossible to draw any inferences from the results of the study. The data collected will reflect only the operations of the organization in a state of disruption and will not be useful for drawing inferences or making decisions about the ongoing operations of the organization.

The sixth stage of the evaluation program involves the introduction of the program to the organizational staff. This stage is important since it will impact the collection of the data. If the staff do not understand what data is being collected, or are simply told that the enclosed forms are to be completed, there is likely to be both resistance to or confusion about the evaluation program. Consequently the data collected may be inaccurate, incomplete or unavailable. It is important to involve the organizational staff at this stage to guarantee that the staff understand the evaluation process and what it is that they are being asked to do for what purposes.

With no conceptual framework, with no real appreciation of what is being done - never mind why, no understanding of anything except how to fill in the data forms, who to forward it to and the deadlines. And

the biggest tragedy of all is that workers are often told "they want us to do this". "They" soon becomes personified as the evaluator ... the only visible person around to hang it on.⁴

Finally the agency can collect, analyze and review the data collected by the evaluation program. This seventh stage of the evaluation process involves three separate activities that Frances Ricks identifies. First there is the simple review of the data. Second the data can be assimilated and interpreted vis a vis its implications for the organization's program. Finally the data can be used to support decisions regarding the organization's program and daily operations.

Whatever happens at this stage of the evaluation program, Frances Ricks notes, that the organization will be faced with making the decisions regarding the use of the information obtained by the evaluation program. The data can be used to support decisions, but responsibility for decision making still rests with the organization itself. The data will not make any decisions on its own.

In this short article Frances Ricks manages to review a number of the main issues relating to the introduction of an evaluation program in an agency. As she identifies the stages that the evaluation program must evolve through she is able to flag those issues that will arise with each stage. As a final note, she indicates that there are three salient factors that must be kept in mind by anyone considering undertaking an evaluation of an organization. First, and foremost, the evaluation

process must be linked to the decision making process. Secondly, the process of evaluation can be understood and directed by the organization's staff. Finally, evaluations can be side-tracked by allowing the evaluators to confuse the purpose of evaluation with other professional tenets such as scientific research, data collection, information systems.

As psychologists we should shift from viewing evaluation only as the scientific pursuit of truth, and move toward perceiving evaluation as a craft which, when applied, facilitates decision making.⁵

In a second article, "How to Get a Handle on Evaluation", Frances Ricks identifies the key issues that must be addressed in formulating an evaluation program. Her article provides "a conceptual overview of the issues which warrant consideration in implementing evaluation in mental health and social service organizations".⁶ Consequently her article provides an excellent basis for a literature review since it outlines the considerations that an evaluation program must address.

She states that, while questions around the decision to evaluate may seem complex, they can be reduced to four simple questions.

Why to evaluate?

When to evaluate?

What to evaluate?

How to evaluate?

By answering these four simple questions the evaluator will predetermine the nature and direction that the evaluation should adopt. In addition, she states these questions can be grouped together to address the two separate phases of an evaluation program: the preparation for evaluation and the technology of evaluation. The questions of why and when to evaluate relate to the problem of the preparation for evaluation. These questions address the motives for the evaluation, and when is it appropriate to start the evaluation. On the other hand, the questions of what and how to evaluate relate to the problem of defining exactly the focus of the evaluation program and how to evaluate that particular area of the program. These four questions assist the evaluator in developing his evaluation program so as to ensure that the evaluation program is evaluating the agency effectively.

In preparing to evaluate Francis Ricks identifies four possible motives for implementing evaluation. Each of these motives, she notes, will have an impact on the nature of the evaluation system. For example, if the motive for evaluation is "short term and long term planning of resource allocation in relation to community needs"⁸, then the evaluator will be addressing the questions of community needs and the impact of the program in addressing these needs. What services are required and should be planned or supported for the community? What services are not needed and should not be supported? If the particular program is community oriented, the question of the short term and long term planning addresses the development of agencies in meeting specific community requirements. In this scheme the role of the particular agency the evaluator is examining will

likely be assessed in relationship to its ability to fulfill the needs of the community.

If the motive for evaluation is to define an already intact program, the evaluator may be attempting to assess what resources are already available for a specific problem. A third motive for evaluation is accountability which directs its focus on the questions of the usefulness of the agency's services. In addition it raises the issues of the effectiveness of the particular agency in providing those services and the efficiency with which the program provides the services. If this is the motive for evaluating the program, the evaluator questions the need for the service. There always exists the likelihood that funding for the service may be terminated if the agency is not found to be the best method of providing the required service to the community. Finally, the fourth motive for evaluation which Frances Ricks outlines is a quest for knowledge. In this situation the evaluator is interested in the impact of the service.

All of these motives for evaluation address the issue of why evaluate. In Frances Ricks' scheme of preparing for an evaluation, answering the question about why evaluate is an important stage of the evaluation process. She notes that the organization must identify its motives for evaluating prior to any serious evaluation program being implemented. Once this is done it is possible for the agency to move on to the next part of the evaluation process. It is now possible to answer the question when to evaluate.

In order to answer the question of when to evaluate, Frances Ricks notes that five areas of the agency must be examined in order to determine when to implement an evaluation program. The evaluator must look at the clinicial readiness and the administrative readiness for evaluation. How prepared are the clinicians and the administration of the agency to support and to provide the necessary resources for an evaluation program? The next important item to consider is the availability of resources for the evaluation program. Are the resources available to pay for an evaluation or to pay to have an evaluator set up a program? Is the agency financially able to support such a program? The final two questions relate to the organizational stability and the political climate within the organization. The question of the organizational stability raises the issues of the effectiveness of record maintenance within the organization. If the program is to be evaluated a centralized record keeping system will have to be developed. This will enable the evaluator to collect the data necessary for the evaluation. The political climate relates to questions that the funding body may have about agency effectiveness.

Once the evaluator has addressed all these areas, it is possible to move to the second phase of evaluation which is the development of the technology of an evaluation program. Frances Ricks notes that the five areas that determine the readiness of the agency to evaluate its program can be broken down into five stages of development. Each of these stages identifies a particular development stage of the agency and affect its readiness to evaluate its program. She feels that the question of when to evaluate is determined by the stage at which the particular agency is at

and this determines the type of questions that the evaluator can ask of the agency. Consequently, in asking the question when to evaluate, she argues that the evaluator must address the five areas of agency readiness, and determine at what stage each of these areas of the agency are. As a result, the developmental stage that the agency is at will determine the questions that the evaluator can hope to ask and to answer in his evaluation program.

TABLE 1: Indicators of readiness for stages of evaluation

	Stage I. Recording, retrieving and grouping information.	Stage II. Asking and answering questions from available data.	Stage III. Further analysis of the information gained from Stage II.	Stage IV. Asking questions which require further data.	Stage V. Asking questions which require altering the environment.
Clinician Readiness	Clinicians prepared to record data.	Clinicians interested in asking questions of the existing data and are using it for reports.	More clinicians involved and exhibit interest in additional analysis and discussion.	Clinicians asking more complex questions than existing data can address. Clinicians devise methods for additional data collection.	Clinicians able to accept manipulating the environment in order to obtain valid and reliable data.
Administrative Readiness	Administration prepared to give direction & resources for implementing recording system.	Administration ratifying the consideration of data ensuring & completing the feedback loop.	Administration giving support to clinicians for questions asked, generate their own questions & "gear up" to meet future information demands.	Administration totally aware and actively participating in the evaluation process.	Administration prepared to re-allocate resources, speak to issues of resistance & prepared for policy change.
Resource Availability	Resources are available.	Resources available (man hours) to ponder data & use as decision aid.	Availability of more than simple analysis system; research — evaluation person available on consultation.	Staff person with recognized expertise in the area of evaluation available.	Grant monies available in addition to staffing.
Organizational Stability	Recording can be systematic and centralized.	Feedback system intact and consistently maintained.	Agency-wide awareness of utility and retrievability of information.	Agency ensures complete awareness and involvement. Agency stable enough to share with other agencies.	Agency can tolerate structural & functional changes to accommodate design as necessary for random assignment and repeated treatments.
Political Climate	Funding body expects agency to keep track of "traffic" data & respond to questions on request.	Funding body expects agency to support its budget requests and accountability statements with good descriptive data.	Funding body expects agency to systematically use evaluation data externally for accountability, and internally for planning.	Funding body expects agency to engage in self-scrutiny re efficiency and effectiveness; routinely evaluate all new services as a condition of implementation.	Funding body expects agency to provide evaluation data which is generalizable to other agencies.

The five stages of readiness for evaluation range from relatively simple to more complex areas and questions that the evaluator can ask. For example, stage one simply addresses the questions of "Recording, retrieving and grouping information". How possible is it for the evaluator to record the data necessary to evaluate the agency? Are the clinicians prepared to record the data? Is the administrative body of the agency prepared to give resources and direction in determining and developing a recording system that will assist the evaluation process? Is the agency prepared to provide the necessary resources for the evaluation? Can the recording system be centralized?

The second stage asks for more complex questions relating to the available data. For example, clinicians move from a simple posture of being prepared to record the data to a posture of asking more complex questions of the data already in the agency. Thus, the clinicians in the third stage move on to a more intensive analysis of the information gained at stage two of the evaluation process. Stage four represents a more complex situation where new questions may be asked that require the collection of additional data not already being collected by the agency. At this stage the clinicians are prepared to collect additional data in order to be able to answer these complex questions. The final stage relates to "asking questions which require altering the environment". At this stage the clinicians are prepared to develop a more complex, experimental evaluation model. Here, the emphasis becomes one of obtaining valid and reliable data.

Frances Ricks argues that in preparing to evaluate questions of why and when must be answered prior to the implementation of an evaluation program. Why addresses the question of the motive for the evaluation. It will determine the nature of the evaluation and very likely the support that the evaluation will get from staff. For example if the evaluation is exploring questions that relate to the possible continuation or termination of the program, staff are very likely to be resistive to the evaluation program. If, however, the questions relate to questions of outcome measure and the results of treatment, the staff are more likely to be interested in supporting that type of evaluation. Thus, once the motives have been identified it is possible to move on to the question of when to evaluate. The evaluator must examine five areas of the agency to determine where the evaluation should begin and when it should begin. Again, in making the decision when, it is possible to look at Frances Ricks' chart and identify what stage the agency is at. This will assist the evaluator in determining what type of evaluation may be possible in view of the stage that the agency is currently operating at.

The table entitled "Indicators of Readiness for Stages of Evaluation" can be used in a number of ways. First, an evaluator can use the table as a means of determining what stage the evaluator would like to reach in his work with the agency. By reading the statements listed below each stage of the evaluation project, the evaluator will be provided with a number of tasks that will be essential for him to complete if he wishes to move his evaluation project to that particular stage of development. For example, if the evaluator wishes to move his evaluation project from stage one to stage two, then he must encourage the clinicians in the

agency to become interested in asking questions of the existing data and to start using it in developing reports on the agency's operations. This represents a movement in the clinicians' desire to be involved in the evaluation project from the state of being prepared to record the data. Consequently, the evaluator now has a task clearly in mind and can set about encouraging clinicians to develop a greater interest in pursuing the evaluation project.

A second possible use of Frances Ricks' chart is to use it as a descriptive statement of the agency's readiness for evaluation. The stage at which the agency appears to be operating will determine the readiness for evaluation in the agency. This will assist the evaluator in identifying the type of evaluation strategy that is possible at that particular time in the agency. A final use of the chart is as a guide for the evaluator to help him determine at what stage of evaluation the agency is currently operating. This will assist the evaluator in understanding what operational problems in the agency are preventing the smooth functioning of the evaluation study.

Once Frances Ricks has identified the process of preparing for evaluation, she goes on to discuss the technology of conducting evaluation research. In this part of her article, she identifies the major strategies of evaluation as being five in number. The first she identifies as the development of an information system in the agency. This involves the development of a systematic method of collecting data across the study population. This type of evaluation collects generalized data across the subject

population. It is frequently used to answer questions relating to the nature of services provided by the agency and the quality of these services.

A second strategy of evaluation she describes as a management study.

This type of evaluation addresses questions relating to the "efficiency and effectiveness of management styles and/or organization structures".¹⁰

A third evaluation strategy relates to the treatment process. This particular strategy of evaluation tends to focus on defining "the process or the nature of what gets delivered".¹¹ These types of evaluations tend to focus on an attempt to determine the quality of the treatment processes occurring in the agency. Output studies are a fourth strategy of evaluation. This type of evaluation attempts to measure the outcome of a particular program in changing or improving the lifestyle of a particular target population. Finally, Frances Ricks identifies applied research on children as a major strategy of evaluation. She states that this particular area of evaluation research attempts to "define different sub-populations of children through child development research".¹² This type of research aims at providing further knowledge on children and childhood development through intensive studies of children.

The importance of identifying these types of evaluation strategies relates to the motives for evaluation studies. If, for example, the particular motive of an evaluation study is for short term or long term planning, then the model or strategy of evaluation will be an information system. The information system will collect ongoing information relating to the

target population and determine the nature of the total population being serviced.

Therefore, once an organization has explored its motivation for doing evaluation, has determined how ready it is for evaluation, and has decided to what degree it is willing to allow the evaluation process itself to affect the service received by the clients, it is ready to choose one or more of the above evaluation models.¹³

This final decision, once it is made, allows for the beginning of the evaluation project. The agency is now able to make decisions about hiring an evaluator or consultant, or conducting an evaluation with an in-house evaluator. The agency can also make decisions around the format the evaluation will assume, and the degree to which they will permit the evaluation to interfere or change the agency operations for the purposes of data collection.

In addition, the agency can decide whether they wish to have a descriptive evaluation, a naturalistic observation, time sampling or control group type evaluation. Each of these types of evaluation increase in complexity from simple descriptions of the program to more experimental types of evaluation projects where control and experimental groups are used. For example, is it permissible to allow for the designation of a control group and an experimental group where one group is "treated", while the other group is not "treated". The use of a control group allows the agency to establish a group for comparison with the experimentally treated group. Such comparisons enable the evaluation to make

more reliable judgments about the effectiveness of the program. On the other hand, if the agency is unable to select a control group due to its mandate or ethical standards, it is likely that one of the other methods of evaluation will be used.

It is important in making these decisions to reconsider the indicators of readiness for evaluation in deciding which method of evaluation will be selected. For example, at stage five in the readiness for evaluation a control group or time sampling method is much more appropriate than a simple descriptive or observational type evaluation. On the other hand, an observational or descriptive type evaluation implies the use of an information system.

It is obvious from this discussion of evaluation stages that the stage of development affects the particular type of evaluation that is possible for any agency. Therefore, in preparing for an evaluation it is important to carefully assess the readiness of the agency for evaluation. The degree of readiness will determine the strategy of evaluation possible within the agency. It would be foolhardy to attempt to conduct a control group evaluation study in an agency where the basic information systems are totally lacking. The chart identifies a number of very specific issues that each evaluator must address in order to implement an evaluation program. Her article also provides a framework for examining some further literature on evaluation research.

In the third article, "Seven Deadly Dynamics of Evaluation", Frances Ricks goes on to elaborate on some of the particular problems that evaluation

faces. Once again, she emphasizes the use of evaluation for decision making. She indicates that the purpose of evaluation should be to pull together information for the specific purpose of decision making.

The first dynamic of evaluation that she describes she puts under the title "'False Hope' Meets 'Token Buying In'".¹⁴ She indicates that agencies frequently begin an evaluation program with the false belief that the evaluation will solve all the agency's particular problems. This phenomenon, which she describes as the "false hope phenomenon", is usually met with a token buying in by front line staff. She indicates that staff passively become involved in the evaluation project and cooperate on a minimal basis. Essentially there is no real staff commitment to the evaluation project.

"'Getting What You Did Not Want' Meets 'Greater Clarity'".¹⁵ is the second dynamic of evaluation. In other words, the agency initiates an evaluation project and obtains information that it did not necessarily wish to obtain. This results in questions being asked about what exactly the agency hopes to learn from evaluation.

The agency must define what it hopes to obtain from the evaluation process. The initial decision to evaluate, however, can generate a great deal of discussion in the agency. The process of defining what is to be obtained from an evaluation can create problems for some agencies. Staff discussions can end in a stand off or impasse where there is no agreement on the material to be obtained from the evaluation. Another possible

result is a continuous debate where the agency finds it impossible to make decisions about what exactly they hope to achieve from their evaluation program. A third danger is that administrators will impose evaluation on staff. This can have devastating effects on staff willingness to participate in the evaluation program. If the evaluation is being handled correctly, the staff and the administration should be able to negotiate, through a series of compromises and discussions, the type of information that they hope to obtain from the evaluation project. It takes a great deal of patience to involve staff and work through some of the concerns generated by the introduction of evaluation into an agency.

Ricks also discusses the motivation for evaluating a program meeting with the readiness of the agency to be evaluated.

The readiness dynamic requires an assessment of the program and/or organization with regard to clinician, administrator, political and resource readiness.¹⁶

Again, she refers to her chart for reference for the evaluator to determine the stage of readiness of the agency for evaluation.

Frances Ricks notes that designing an evaluation is quite simple in itself. It is possible to develop measures, procedures and data collection techniques for the agency very quickly. However, the important decision is what the data should look like in order to support certain decisions in the agency. She notes that frequently agencies fail to decide which data will support future agency decisions. Consequently,

once the data is collected, a process of politicking in the agency begins as various groups in the agency attempt to use the data to support a wide variety of decisions. Here, Frances Ricks stresses the concept of a "decision theoretic" approach to program evaluation. She indicates that Marcia Guttentag's paper on this particular concept supports the ideal of having pre-determined decision rules for the data. This avoids politicking in the agency and the misuse or abuse of the data. The danger in not previously establishing how the data will be used is that the data can be used to make decisions erroneously. In other words, the decisions can be based on data that was never collected for or intended to be used for supporting the particular decision being made.

A fifth deadly dynamic of evaluation that Frances Ricks describes is the process where the evaluation design encounters the environment. It is at this point that the agency must ensure that the evaluation procedures are as unobtrusive as possible to ensure that the program is effective. This process will ensure that the data is collected and that staff will find it acceptable to provide the data. It does not create an additional burden on staff to collect the data as it becomes part of the agency's routine functioning.

"Johnny come lately"₁₇ is the sixth dynamic. This refers to the danger implicit in developing an evaluation program and then simply presenting it to staff fait-accomplis. The staff quickly see the evaluation project as an imposed requirement over which they have no control and for which they see no real value. Consequently, the likelihood that they will

collect data in an efficient and conscientious manner is slim. The evaluation is likely to generate staff hostility and resentment as yet another onerous task imposed upon the staff.

A seventh problem evaluation faces involves the presentation of the data to the agency decision makers. This particular dynamic has three particular parts to it which involve feedback. First, there is the question of reviewing the data that has been collected. The next step is to assimilate the data in some sort of format that is constructive and understandable. Finally, the evaluator must use the data for decisions or planning purposes. This is the most critical part of the whole evaluation project, since sooner or later someone will have to make a decision based on the data collected.

Hence, Ricks has outlined seven of the implicit dangers in an evaluation program. She concludes her article by encouraging evaluators to consider three particular aspects of evaluation research that will prevent a number of these pitfalls. First, she suggests that the evaluator should have clarity of purpose in developing the evaluation program. In other words, the evaluator should take time to "simultaneously negotiate with all levels of the staff what they want to know and how they will use the data".¹⁸ This clarity of purpose and the involvement of the staff will prevent a number of the difficulties described earlier in Ricks' article. The second important consideration in developing an evaluation project is to consider the evaluation design. Once again, she stresses the importance of negotiating the evaluation design with members of the agency who

will be involved in the evaluation project. Finally, she encourages evaluators to consider decision making requirements in developing their evaluation programs. By being clear in advance how the outcome will affect decisions in the agency, or what sort of outcome is required to support certain decisions, the evaluator will avoid the dangerous politicking that can frequently occur in an agency.

Ricks identifies in her article a number of the dangers that evaluators face as a part of the practice of their trade. These dangers are implicit in the whole evaluation process simply because evaluation should and does contribute towards decision making in the agency. Consequently the evaluator should take particular time in addressing these concerns to prevent future disasters around the use and outcome of his evaluation study.

In these three articles, Frances Ricks raises a number of controversial issues that are worth exploring through the literature on evaluation research. Certainly some of the issues that she raises are of a concern in particular to the evaluation study at Children's Foundation. As a result, the discussions of the literature will be useful in reviewing the process of the evaluation project at Children's Foundation.

One of the first issues that Frances Ricks raises relates to the question of the use of evaluation for decision making purposes. Marcia Guttentag underlines the role that evaluation research must play in decision making. In her article "A Decision-Theoretic Approach to Evaluation Research",

Guttentag underlines the importance of using evaluation in decision making processes. She states that "the requirement for a usable, conceptual framework and methodology that links inferences about states of the world, the values of decision makers, and decisions" ¹⁹ is one of the central issues that evaluation research must address. Guttentag develops a model for evaluation research which she believes addresses all these issues and works towards providing information for the decision making process.

Decision makers, not researchers, make decisions. While the decision maker always should be, and sometimes is, willing to consider the evidence bearing on his options and his choice among them, virtually never is he willing to delegate to that evidence, or its finder, the task of being decisive. ²⁰

She emphasizes that the decision maker must make and take responsibility for decisions in the organization. Such decisions, however, are not always easy since there are multi-dimensional considerations in any decisions that the executive must make. Any decision involves a choice between various options. Typically, a decision is made through a process of balancing the options available. She notes that typically, while an organization has an identified decision maker, decisions are frequently made by individuals or groups in positions inferior to the identified decision maker. Through a process of negotiation and discussion the subordinate groups present options to the decision maker for ratification or a final decision. However, the decision making process involves groups with inconsistent values meeting and discussing which options are most

plausible and most attractive.

A technology for explicating, comparing, and when possible, reconciling, and ultimately aggregating such inconsistent values of groups in conflict is clearly needed for social decision making.²¹

Any decision can be divided into four phases which Guttentag feels are also involved in evaluation research. The first phase is the recognition of a decision problem. In other words, the decision maker must recognize that the decision is required on a particular item and must be able to define and recognize the dimensions or variables involved in making the decision. Before the decision maker is able to reach a decision, he must at least be able to define the forces that impinge upon his decision and the likely outcome of whatever his decision will be.

The second phase of the decision making process Guttentag terms probability evaluation. She notes that this stage of the decision making process involves a diagnosis or a data gathering process. In this phase of the decision making process the decision maker attempts to gather as much information as possible about the decision he is about to make.

The third phase of the decision making process Guttentag refers to as outcome evaluation. In Guttentag's view, this involves the attachment of values to the impact that a decision will have on the organization. It is through this process of attaching values to the decision making process and its outcome that the decision can be reached. The final phase of the

decision making process is obviously the decision itself. Here the decision maker makes the decision and selects a course of action among the possible actions that he can take.

Guttentag feels that it is important to make a distinction between probability evaluation, which involves the gathering of facts and interpretation data, and outcome evaluation which involves the assigning of values or the ordering of values on a decision..

One contention of this chapter is that these two distinct operations have been lumped together under the label Evaluation Research; that they are different; that they require quite different kinds of procedures to provide answers; and that answers to both are typically necessary for wise decision making.

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In other words, it is necessary to conduct both probability and outcome evaluations prior to making decisions. The crucial stage in decision making, however, is that values must be attached to the various options available to the decision maker, as opposed to the probability evaluation which does not assign values to the options available.

From this standpoint, Guttentag goes on to develop her model which she describes as being similar to "multi-attribute utility measurement" procedures.

The essence of multi-attribute utility measurements, in any of its versions, is

that each outcome to be evaluated is located on each dimension of value by a procedure that may consist of experimentation, naturalistic observation, judgment, or some combination of these. These location measures are combined by means of an aggregation rule, most often simply a weighted linear combination.

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This then is the process which Guttentag envisions as useful in assigning values to decision making options. As a result, she goes on to elaborate on ten steps of her evaluation model. She feels these procedures will assist the evaluator in assigning values to the options available to the decision maker.

Guttentag's first step in her model for evaluation research involves the identification of the person or organization whose "utilities are to be maximized". This process involves identifying all the individuals or organizations who have a stake in any decision. Such individuals or organizations must be considered in the evaluation or decision making process since the outcomes will impinge upon their operations. At this stage Guttentag feels it is important to involve those persons who are able to speak for themselves in the evaluation process since they will be affected by the decision.

The second phase of the decision making process is the identification of the issues involved in any decision. The decision maker must also identify the entities or items to be evaluated. These three steps Guttentag states are more or less philosophical. The first step involves the identification

of whose utility or benefit is to be considered as being affected by the decision. The second process involves the identification of the purpose or impact of the decision. The third question involves the identification of the use or potential use of the decision making process.

The fourth step in Guttentag's model for evaluation involves the identification of the value of the decision. While this may sound difficult, Guttentag states that the fourth stage can involve a simple list of the goals that seem important for the decision. How the decision will impact the goals and what the outcome is likely to be. Here the goals should be stated as dimensions or purposes of the decision making process. One such goal could be the reduction of drinking driver accidents.

The fifth stage in Guttentag's evaluation process involves the ranking of the dimensions in order of importance. This is an important stage in the development of the decision making process in that the decision maker is forced to list the order of priority or importance of the various dimensions in any decision. Once this is done, the next five stages of the evaluation process or decision making process are mathematical. In stage six of the evaluation process Guttentag rates each dimension in order of importance. Step seven involves the calculation of a probability which will represent the weight or importance of each option on a scale predetermined by the decision maker. The eighth step in this process is to determine a specific value for each dimension involved in the decision making process. The final two steps of Guttentag's approach to evaluation or decision making involves the mathematical manipulation of the dimensions

involved in the decision making process. This will assist the decision maker in ranking his decisions and options on a pre-determined scale.

While this procedure appears complicated and unwieldy, Guttentag insists that the procedure is useful in assisting the decision maker in ranking his decisions on a scale which will facilitate positive decision making. Through this process it is possible to assign values to the decisions that a decision maker faces and on the basis of assessing this value vis a vis other options available the decision maker will be able to make decisions that will maximize his desired outcome. Guttentag notes that there are no absolute values assigned to any of the dimensions so that the assignment of values can be a purely subjective matter. This process simplifies decision making by presenting the decision maker with a scale of choices rather than a simple list of confusing and unscaled options.

While Guttentag's approach to decision making or evaluation planning may seem complex, it underlines Frances Ricks' earlier arguments that evaluation must be planned for decision making purposes. In addition to emphasizing the need for evaluation to contribute to decision making, Guttentag attacks five commonly held myths about the evaluation process. First she discusses the "reification of programs". Guttentag notes that one of the downfalls of evaluation research has been the tendency to view programs as static arrangements. However, programs do change over time, and evaluation researchers must not be discouraged by this fact. Regardless of the changes that occur, evaluation research must work towards assisting decision makers in making decisions.

A second myth is or has been the insistence on "causal inferences".

Guttentag states that evaluation research does not generate sufficient precision in its operations for the construction of models. It is therefore unrealistic to expect the evaluation research project to be able to make causal statements about relationships between variables.

A third folkway relates to the often held assumption that evaluation research are experiments.

Researchers who have been trained to believe that they must make inferences, that inferences are statistical, and that good statistical inferences grow from experiments therefore find themselves in dilemmas resulting from the intractable, insistent flexibility and diversity of the real world and programs embedded in it. Experimental and quasi experimental designs are treated as Procrustean beds, into which programs must fit in order to be evaluated.

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The result of these types of evaluation research are referred to as pseudo-experiments by Guttentag simply because in most decision making or evaluation processes experimental controls or true experimental procedures are not possible. As a result, the outcome of any evaluation research project is at the best a probability.

A fourth misdirection of evaluation research is the attempt to differentiate formative evaluation, or evaluation used as feedback for decision making, from summative evaluation, which is supposed to be an overall and final evaluation of a project. Guttentag notes that evaluators have attempted to separate formative evaluation, summative evaluation and pre-

program planning as distinct processes. This, however, is wrong, she feels, because it is impossible to distinguish hard and fast lines in any evaluation or program. On the whole, evaluation should assist the decision making process on a more or less continuous basis from pre-program planning through the implementation to the final assessment. Consequently, the differentiation that evaluators attempt to make between planning and formative and summative evaluation are artificial differentiations. In reality evaluation must contribute to the decision making process on a continuous basis throughout the program's development and change.

The final myth or folkway of evaluation researchers that Guttentag attacks is the "baseball statistician's approach". She characterizes many evaluators as adopting the statistician's approach to evaluation in which they collect a wide variety of data on a program. Like the baseball statistician, the evaluator attempts to collect volumes of statistics on the operation of the program. The unfortunate deficiency in this particular approach to evaluation is that "too many facts are almost as difficult to use for decision making as too few"²⁵ As a result, the decision maker is faced with a column of information about his program which is not in any way conducive to decision making processes.

In summary, Guttentag reinforces Ricks' suggestion that evaluation must be used for decision making purposes. Similarly, organization-wide or province-wide information systems are not evaluation systems. Like the baseball statistician approach, a province-wide data collection system does not provide information that is useful for decision making purposes.

Guttentag's model presents one approach to implementing an evaluation research program that will contribute directly towards the decision making process in an agency. She feels that this model is the only method that will likely assist any decision maker in making valuable decisions about a program.

John A. Ross in "Decision Rules in Program Evaluation" explores the concept of decision rules. He notes that "decision making is the process by which the best course of action is selected from an array of alternatives"²⁶ Again, he emphasizes that program evaluators should assist decision makers in collecting information that is useful for decision making. The program evaluator must be able to contribute towards a statement of the "value of alternatives that are being considered for a given decision problem"²⁷ Ross indicates that the importance of being able to provide a decision maker with this type of information is that the decision maker basically has only three alternatives which are to terminate the program, modify it or continue it as it exists. Consequently, an evaluation study must provide information for the decision maker that will enable him to make one of those three decisions.

Ross argues that the use of an explicit set of decision rules provides an organizational attribute for an evaluation study. It gives the evaluation study a direction or purpose, that is, to collect enough data to allow for the decision maker to make a valid decision supported by the data collected.

Explicit specification of decision rules has the advantage of continually focusing evaluators' attention on the outcomes and

uses of their data. It ensures that all of the important questions are addressed at each phase of the evaluation. ... Throughout the evaluation, the formulation of decision rules provides the structure for integrating each evaluation activity into a coherent whole.²⁸

Ross notes that there are some arguments against the use of decision rules in evaluation. For example, one fear is that the use of decision rules would limit the development of creative solution through the evaluation process. The evaluation process will tend to become stilted in terms of focusing on pre-determined problems or courses of action as opposed to more innovative, experimental evaluations. The use of decision rules is not necessarily helpful where an evaluation project is being run to generate new methods or techniques in the organization. A further concern about the use of decision rules in evaluation research is that it may reduce the number of optimal solutions available to the decision maker. By focusing on a set of pre-determined conditions the data collection may not generate some of the options available for the decision maker. The use of decision rules may not reflect changes that occur within the organization which will preclude the use of the decision rules that were developed prior to the implementation of evaluation. A final argument against decision rules may be that decisions of specific options may be erroneously based on assumptions about how people will react to a decision. However, Ross argues that in many cases decision rules are useful in program evaluation.

Ross notes a number of conditions under which the use of decision rules are appropriate, and advantageous to an evaluation effort. For example,

the use of decision rules is helpful in organizing the scope and content of an evaluation study. In addition, decision rules are most suitable where the evaluator is contributing towards the rational decision making process of the agency. Here, the evaluator collects additional information to support or to direct decisions regarding program changes or modifications.

As a result of the concerns for and against the development of decision rules, Ross generates a number of specific recommendations about the development of decision rules. First, he feels that decision rules must be specific rather than general rules. By being specific, the decision rule does not allow for rival interpretations of the data or disputes about the implications of the data. Second, decision rules should be sensitive to the values of the consumer of the evaluation project. If the evaluation project is to be of use to the consumer or to affect the decisions about the program, then the evaluation must be sensitive to the needs of the consumer. A third recommendation for the use of decision rules is in focusing the activities of an evaluation project.

In other words, decision rules should begin to be developed at the stage of identifying the questions to be addressed in the evaluation and continue to be refined during other phases of the study. The successive approximation of the final set of decision rules through several cycles leads to the closer interpretation of decision rules with other evaluation tasks and increases the probability that all tasks will be completed within the project time line.

A final recommendation is to make decision rules tentative through the evaluation process. By this process, the evaluator should be able to address the problems of changing program structures during the process of the evaluation.

In his conclusion, Ross emphasizes the need of evaluation research to contribute to the decision making process. In addition, however, the evaluator must be aware that the decision making process operates in a complex environment in which "the political context, values of the organization and its incumbent, and competing interpretations of the information"³⁰ are important forces to be contended with. It is therefore unsurprising to Ross that much evaluation research is not utilized simply because it does not provide pertinent data for decision makers. The use of decision rules in program evaluation will contribute towards greater use of evaluation studies by decision makers. In addition, decision rules have the previously stated advantages of providing organization, focus and direction for many evaluation studies.

Marvin C. Alkin attempts to develop a theory of evaluation that will address three specific areas of concern which he believes any theory of evaluation must cover. Alkin believes that each of the specific areas of concern are important to any evaluation.

- ... A theory of evaluation should:
- (1) Offer a conceptual scheme by which evaluation areas or problems are classified;
- (2) Define the strategies including kinds of data, and means of analysis and reporting appropriate

- to each of the areas of the conceptual scheme;
- (3) Provide systems of generalizations about the use of various evaluation procedures and techniques and their appropriateness to evaluation areas or problems.³¹

Such a theory of evaluation will provide evaluators with guidelines for evaluation studies.

As a first step towards developing a theory of evaluation, Alkin addresses the problem of defining evaluation. In his article "Evaluation Theory Development", he presents a four-part definition of evaluation. First he sees evaluation as a process of gathering information. A second important part of evaluation, which re-emphasizes Frances Ricks' articles, is that evaluation must be used for decision making purposes. The third part of Alkin's definition of evaluation is that evaluation information must be presented in a format that is useful for decision making. The evaluator must assume responsibility for presenting the information he collects in a format which is designed to help the decision maker rather than to create confusion. Finally, Alkin notes, different kinds of decisions require different styles of evaluation. As a result, Alkin develops the following definition of evaluation:

Evaluation is the process of ascertaining the decision areas of concern, selecting appropriate information, and collecting and analyzing information in order to report summary data useful to the decision-makers in selecting among alternatives.³²

Once again, he re-emphasizes the importance of evaluation in providing information for the decision making process. He notes that decision areas,

as he puts it, must be stated in terms of explicit goals and objectives. The selecting of appropriate information requires the evaluator to develop instruments that will collect information necessary to support or guide particular decisions within the agency.

The collecting and analyzing of this information are the primary tasks of the evaluator. The evaluator must take responsibility for these tasks and for presenting the data in a format that assists the decision making process. The evaluator must also make explicit any value systems that he has employed in analyzing the data he has collected. In this way the decision maker, when making a decision between alternatives, is aware of some of the biases of the evaluator. The decision maker can take these biases into consideration when using the data for his own decision making process.

Alkin believes that there are five types of evaluation studies which he relates directly to specific decision areas in an agency. Each of the five types of evaluation attempt to collect specific information for a specific type of decision. Consequently it is important to keep in mind when designing an evaluation study the type of decision required since it will affect the type of information that the evaluator must collect.

The first type of evaluation that Alkin describes is systems assessment. This type of evaluation is designed to provide information about the present state of a system. It is a means of determining if there are gaps between the stated goals of an organization and the present state of affairs of the program. As a result, the system's assessment is "a statement of the status of the system as it presently exists in comparison to

the desired output for stated needs of the system".³³ Essentially, the system's assessment must be related to the needs of a client by attempting to provide the decision maker with information that will guide decisions for client's benefits.

A second type of evaluation relates to program planning. In this type of evaluation study, the evaluator attempts to collect information that will allow the decision maker to make decisions about the effectiveness of specific programs in meeting specific needs. The evaluator must be able to provide the decision maker with information that will provide information for planning programs for specific needs.

A third type of evaluation study is the program implementation study. Here, the evaluator attempts to provide the decision maker with feedback on the implementation of a program. Does the program meet the specific needs stated at the program planning phase? The evaluator must provide information that will allow the decision maker to decide whether or not the program has been implemented in accordance to the stated goals or desired outcomes.

A fourth type of evaluation study involves the program improvement type of study. Here, it is obvious that the evaluator is attempting to provide data and information that will lead to the modification or improvement of a specific program. The evaluator collects data, analyzes it, and provides the decision maker with recommendations for changes in the program to make it more effective or efficient.

The final evaluation area Alkin describes is program certification. In this type of evaluation study, the evaluator is hoping to provide the decision maker with evidence as to the generalizability of the program to other areas. This type of study is frequently required to provide a more rigorous testing of the program through a more experimental style of intervention. Since the program certification style of evaluation is designed to provide the decision maker with evidence as to the usefulness of a program and its adaptability to other locations, it is essential that the information be carefully collected and cautiously analyzed since it will have a direct impact on the duplication of the program.

As seen in Alkin's article, the process of providing decision makers with information for decision making is a core responsibility of any evaluation study. As a result, Alkin basically supports many of the early contentions that Ricks makes about the importance of evaluation contributing to the decision making process. It is obviously important for evaluators to collect information that will be of use for decision makers in planning for, and modification of, programs. As a result evaluators must pay particular attention to the decision making process in an agency when designing the evaluation or when selecting the type of information that the study will collect.

By now, two of the authors reviewed have mentioned varying models or approaches to evaluation research. As a result, it is necessary to examine a number of models or suggested models for evaluation research as there seems to be some discussion and dissention about which model of evaluation research is most appropriate.

Aaron Wildavsky develops the theme of the self-evaluating organization. In his article, Wildavsky suggests that the ideal organization would "continuously monitor its own activities so as to determine whether it was meeting its goals or even whether these goals should continue to prevail".³⁴ He sees this type of organization as an organization that is committed to a continual process of self-examination. In his view, the self-evaluating organization would work towards better program planning as well as towards the change of agency objectives over time. The organization, thus, would become a dynamic entity working towards the improvement of its services while at the same time changing the style and nature of services it provides.

The role of the evaluator in this type of organization is quite different. Wildavsky sees the evaluator as an agent who acts in favour of the agency and supports its goals while being prepared to abandon it in favour of more efficient goals.

The implications for staff in a self-evaluating organization are numerous. Wildavsky notes that staff would have to be encouraged to live in a context in which change is routine. The entire staff of the organization would have to be infused with the spirit of change and evaluation.

The self-evaluating organization will have to convince its own members to live with constant change. ... Man's appetite for rapid change is strictly limited. People cannot bear to have their cherished beliefs challenged or their lives altered on a continuing basis.³⁵

To avoid developing a sense of defeatism, the administrators of the self-evaluating organization would have to be conscious of avoiding the use of organizational resources in areas where there is little chance of success. The process of change would have to be gradual as the organization redefines, redevelops and reorients its operations. This is important if the staff are to avoid the development of a sense of defeatism as the evaluation project continues to encounter difficulties in reaching conclusions or providing valuable research findings. Such an organization must also be prepared to either abandon or drastically modify a number of their programs in order to adopt more effective methods of providing services. As a result, the organization and its members would have to recognize that the evaluative enterprise is being conducted for the purpose of providing ever improving services. If the staff are comfortable and supportive of the evaluation project, Wildavsky feels that such an organization can exist and be successful.

As a result of his suggestions, Wildavsky sees the self-evaluating organization as involving evaluation that can make recommendations for changes to improve programs for new methods in providing services. As a result, the emphasis again is on providing decision making material for decision makers. In such an organization evaluation would have to assume a major role in providing information for decision making processes.

The self-evaluating organization would be sceptical rather than committed. It would continuously be challenging its own assumptions. Not dogma, but scientific doubt would be its distinguishing feature. It would seek new truth instead of defending old errors. Testing hypotheses would be its main work.

Wildavsky obviously believes that such an organization is possible. The role of evaluation in such an organization would again be decision making. Within the organizational context the process of making decisions would be supported by the evaluation study itself.

Before continuing our examination of models of research, it is worth taking one detour which Wildavsky subtly raises in his description of the ideal evaluative organization. The detour is an important one both in terms of the study of Children's Foundation and in terms of general evaluation studies. The nature of the detour - what is the role of the evaluator?

Lee Gurel discusses the potentially conflicting roles of evaluator and administrator in his article "The Human Side of Evaluating Human Service Programs: Problems and Prospects". In a somewhat tongue-in-cheek approach to the difficulties that evaluators and administrators have in relating, Gurel explores the nature of the relationship between these two conspirators in the evaluation process.

Looking first at the context within which manager and evaluator interact, I will call attention to four considerations:

- (1) The conflicting superordinate organizational goals to which the program manager and the program evaluator subscribe,
- (2) The stereotype of scientific omnipotence,
- (3) The extension of rigorous evaluation to areas of public service only recently considered exempt from external scrutiny, and
- (4) The recourse to evaluation as a panacea for programs in failing health.³⁷

Gurel notes that any organization has two sets of goals which direct agency operations in two divergent directions. The first concern or goal of an agency is for stability and survival of its operations. On the opposite pole is the goal of growth and change within the organization. It is on the horns of these two goals that Gurel sees the program manager and the program evaluator trapped. For the manager, his major concern tends to be with preserving the agency and insuring its stability and existence. On the other hand, the evaluator is "necessarily identified with the forces of innovation which pose a threat to stability".³⁸ As a result there is an obvious tendency for the forces of stability (the manager) to oppose the intrusion of evaluators, who are linked with threats of change or instability in the organizational hierarchy.

A second consideration affecting the role of the evaluator is the misguided concept of the omnipotence of scientific enquiry. Gurel notes that our society has tended to accept technology as the cure-all to many problems. As a result we have over estimated the ability of science to cure some of these problems. Unfortunately the social and behavioural sciences have not developed to the extent that the natural sciences have so that the expectations placed by many managers on social science research are unrealistic. Program managers can tend to see evaluators as a cure-all for many program ills. This misconception on the part of program managers creates extreme difficulties for evaluators in producing the types of results that managers hope to obtain from the inexact science of program evaluation.

Another difficulty that evaluators and managers encounter in relating relates to the only recent extension of program evaluation into the social

service field. Evaluation poses threats to two areas of conventional wisdom in social service programs. First, evaluation begins to question some of the basic tenets held by many program administrators regarding the validity of their program. As a result evaluation quickly finds itself challenging many of the "accumulated biases and preconceptions which pass for conventional wisdom".³⁹ Obviously, evaluation poses a threat to the status quo of the organization by challenging its operational philosophies.

In addition, program evaluation can pose a direct threat to the power of the program administrator. Gurel states that "information and knowledge are not neutral quantities once they enter into the public domain".⁴⁰ Program evaluation increases a manager's knowledge and can provide results which can be used to support the political goals or aims of the program manager. Equally, the results of an evaluation study can end up supporting the goals of some opposing group or group of managers within the organization. Consequently, evaluation results quickly enter into the arena of politics. The analogy of evaluation's results to a tennis ball can at times be quite accurate. The only important difference is that instead of one or two players on the opposite sides of the net, there may be half a dozen rival factions attempting to use the evaluation results as a means of scoring a point within the organization.

Perhaps one of the more difficult problems that evaluation research faces is the problem of managers who view the evaluation as a panacea for many of the agency's problems. The evaluator is frequently called into a program, especially when it's in difficulty, and asked to provide some of the remedies to the program's difficulties. Frequently the evaluator, when

called in to this type of situation, finds himself trapped between the program management and a dissatisfied funding body. In this situation, evaluation can quickly be seen as the management's response to a threat of closure or alteration of the program. Trapped in this particular situation, the evaluator quickly discovers a most uncomfortable fit between his hope of providing information for decision making and the manager's hope that the evaluation project will document the validity of the current program.

Having described some of the difficulties that evaluation researchers face in relating to managers and organizations, Gurel continues his examination of the role of the evaluator and the manager. He begins to develop a composite picture of the manager and evaluator which demonstrates that the two individuals tend to be polar opposites. Evaluators can be identified with innovation while program managers protect the status quo. As a result, the program manager may approach evaluation with a motive of providing defence for the operation of the program while the evaluator sees evaluation as a process of assessment and appraisal of the program. The program manager tends to maintain a strong belief in the validity of his program while the evaluator approaches the program with a healthy degree of scepticism. Consequently the evaluator and the program manager find themselves on opposite sides of the same fence.

Another fundamental split between the manager and the evaluator Gurel summarizes as the conflict between scientist and bureaucrat. The bureaucrat can become so identified with the agency and its goals that he quickly becomes submerged in the ethos of the agency. Gurel argues that "he derives security from his identification with the organization and looks to it as

his primary source of personal advancement and recognition" ⁴¹ into which he submerges himself. For the evaluator it is science and professional groups and associations related to scientific enquiry. As a result the pursuit of knowledge and scientific principles overrides any commitment to organizations. The evaluator is not concerned about the goals of stability and continuity in an organization. In addition, the evaluator is frequently committed to a complete and open revelation of the results of his findings, whether or not the results shed a favourable light on the program.

What to the evaluator is nothing more than reporting the facts can be seen by the manager as anything from malicious sabotage to vicious assault. ⁴²

With these four divergent personality characteristics and motives, Gurel goes on to review the manager/evaluator interaction. In this interaction he clearly sees a number of areas of conflict between the evaluator and manager. Each of these areas of friction create difficulties between the program manager and the evaluator.

The first area of conflict or potential conflict relates back to some of the concerns expressed in earlier articles. Initially the evaluator must make an effort to pin the manager down and identify the program objectives. This process also involves the manager in a process of attempting to identify the questions he wants asked by the evaluator. A potential area of conflict at this stage in the evaluation process is that the evaluator can frequently ask simple yet embarrassing questions of the program manager. Questions designed to elicit from the manager a description of the goals of

the program can frequently highlight areas of the service that are deficient.

Program managers seem to get fixated at either listing off detailed activities of the program, or, at the other extreme, they offer some vague super-objective, such as helping people to lead more useful lives.⁴³

This area of conflict can get the evaluation off to a bad start as the manager and the program evaluator struggle to define the program's objectives and goals. In addition, the evaluator will raise questions about the procedures used in the agency and the rationale behind some of the agency's operations.

Once the manager and evaluator have managed to struggle through the stage of identifying the objectives of the program, they are forced to move on to address a second question (that Ricks also raises) which is the motivation for the evaluation. This is an important area. Gurel believes that the failure to explore the motivation for evaluation tends to explain the reason that many evaluation results are never used. For an evaluation to be successful it is important for the evaluator to explore and identify the motives behind the evaluation project. What tends to happen at this stage of an evaluation project is for the evaluator to ignore the manager's motives for evaluation and quickly turn his evaluation project into a thinly disguised scientific endeavour.

Viewed negatively, all that is being advanced is the admonition that one avoid through better planning the kind of evaluation that nobody wants: the evaluation that ends up addressing the

wrong questions, in the sense of questions in which managers are not really interested; the evaluation that is actually a research project in disguise and does not have a built in assurance that policy implications will be forthcoming; ... 44

A final area on which managers and program evaluators tend to develop conflicts relates to the demands placed by the evaluation project on the staff at the agency. If the relationship of the evaluation project and the evaluator to the agency staff is not carefully handled, the manager will quickly find himself caught in a cross-fire between his own staff and the evaluator and the evaluation project. If staff are informed and involved in the evaluation process this cross-fire can be prevented. In addition, Gurel points out that if staff are provided with feedback through the process of developing the evaluation and are rewarded for participating in it, there is a greater likelihood that the cross-fire will not develop between the organization staff and the evaluator. In situations where the evaluator is attempting a rigorous experimental design there will be pressure on the administrator to maintain the program intact in its current operational stage while the evaluator attempts to collect the information necessary for the evaluation project. This attempt to maintain the program at a static stage can be another major source of conflict between the manager and the evaluator. While the evaluator may be insisting on a static program, the manager will be forced to accept changes over time and that some of the changes he will have little or no control over.

In summary, the roles of the evaluator and manager can be difficult roles to handle. As indicated in this article they frequently come from divergent directions with different purposes in mind when the evaluation project

is being developed. Consequently, being aware of the issues at hand and attempting to identify them as the evaluation project goes along should prevent a number of these difficulties.

What Gurel's tongue-in-cheek description of the evaluator does provide is further issues to be considered in the consideration of models for evaluation research. In reviewing a number of suggested models for evaluation research it is worth keeping in mind the issues of divergent goals by the evaluator and the administrator.

With the increasing emphasis on accountability and the allocation of funds for resource development and operations, human service organizations are being required to be more accountable for the services they provide both their clients and their funding bodies. The result according to C. Clifford Attkisson et al is that evaluation is becoming an important part of every agency's functionings. In fact, they believe evaluation research is becoming an extension of traditional accounting methods in every agency. Now agencies are adding to their traditional financial accounting systems a program accounting or evaluation function. As a result, the authors feel excessive strain and expectations are being placed on the new field of program evaluation.

The authors feel that many factors have prevented the growth of adequate evaluation methods. Initially, the consumers of the service or the funders are placing excessive expectations on agencies for evaluative information. At the same time, funding for conducting evaluations or for developing adequate evaluation tools is being limited. Even where funding is available,

the availability of adequately trained evaluators is limited. An equally important hardship on the evaluation research field is the frequently impoverished or inadequate information systems in a large number of human service organizations. In addition there is a great deal of ambiguity about the most beneficial use of evaluation research in the organization.

As a result of the problems facing evaluation research, the authors raise the question "whether the evaluation field is currently mature enough to respond to the hefty expectations being placed upon it by law, by administrators, and by evaluators".⁴⁵ The purpose of their article is to review some of the important questions currently facing evaluators and evaluation research. They attempt to answer some of the questions raised about the ability of evaluation research as a field to respond to the demands being placed upon it. In reviewing this article, many of the questions that the authors raise answer Frances Ricks' original question about "why evaluate?".

The authors describe the ideal self-evaluating organization and some of the problems that evaluation faces in making itself useful to agencies. The description, of course, is based on the earlier description by Wildavsky of the ideal organization. This type of organization would be involved in a continuous monitoring of its own activities and would be able to assess the degree to which it is currently meeting its goals. In such an organization, any suggestion that its goals were not being met effectively would prompt administrators to implement program changes to make more productive use of their materials and resources.

While this ideal organization is probably unattainable, it still is something that each organization should aim towards, according to the authors. In addition, the authors state that, as late as 1973, Weiss claimed that program evaluation, "with its fundamental tenet of improvement based on assessment, is a typical movement within the field of human services".⁴⁶ As a result, there is a great deal of pressure for organizations to become familiar with evaluation techniques and to make use of these techniques to ensure that resources and services are being utilized to the utmost efficiency. There is now a need for human service organizations to move from a static organization to one that is much more aggressive in ensuring that the services it provides represent the most efficient and best use of resources.

As a consequence, human service organizations must shift from being static providers of pre-determined types of service towards becoming organizations whose goals are

- (a) to meet human needs with that seems to be the best service methods available,
- (b) to monitor the effectiveness of service methods, and
- (c) to improve or change services in the light of new information.⁴⁷

In reviewing the literature on human services' evaluation studies, the authors state that it is obvious that community based agencies should do more evaluation. They also state when evaluation findings are available, such findings should be taken more seriously in terms of planning services for individuals. There are a number of causes for this lack of use or utilization of evaluation studies.

One reason for the under-utilization of evaluation studies, the authors note, is the somewhat limited validity to agencies of studies currently being conducted. A number of elements contribute to the problems that evaluation studies currently face. First of all, any evaluation faces the problem of converting broadly stated goals into objectives that can be measured through an evaluation process. Secondly, the evaluation process must also deal with the essentially uncontrolled or uncontrollable operations of the agency as it continues its daily operations. In addition, as evaluation studies begin, it becomes obvious that standards of service are not equivalent across the organization. As a result the evaluation study faces the problem of assessing the efficiency of the agency based on a number of levels of service delivery. Another serious problem results from the conflict between administrators and evaluators over program development and program operation. Finally, there is the hostility that exists between the agency and the external evaluator. Conducting an evaluation study is not a simple task. It requires a great deal of skill and determination if the study is to be conducted at all and if the results obtained are to be of any use or validity for the agency.

A second major problem that evaluators face is the question of utility of the findings. While many evaluators receive training in experimental methods and control, few are able to address the question of making studies useful to agencies. Many of the analyses that evaluators undertake, while interesting, are of little use to the agency. Program administrators also tend to interpret negative results as justifications for the status quo. When an evaluation is conducted and results are not positive the results tend to be ignored. Program administrators frequently ignore evaluations

where questions are raised about the operations of the agency.

Another major factor affecting the usefulness of evaluation studies the authors describe as management deficiency. They note that few program managers have any formal training in administrative work. Managers in human service organizations usually obtain their training from experience on the job. They tend not to be familiar with the usefulness of evaluation studies to decision making processes. This problem is compounded by a frequent lack of clear definitions about the program and its functioning. As a result it is common to see a program where the expected outcome or impact of the program is only vaguely stated, if at all. In addition, frequently there tends to be a lack of connection between a variety of resource allocation decisions and the desired outcomes or impacts that the program may have. A final major problem that the authors see in the area of management deficiency relates to the low management skill in being able to act on evaluative results.

Program evaluation data, when not seen as negative input, may be viewed by administrators as an interesting novelty, but not something to utilize in decision making.⁴⁸

A final influential force affecting the usefulness of evaluation studies relates to the complexity of decision making. The authors note that evaluation takes place in a political process and should be considered an intricate part of the whole process. Any evaluation study in this type of arena faces a variety of competitive perspectives, values and influences in the agency. Evaluators must recognize that their studies will be only one

of many sources of information that administrators will use in making decisions. The wide variety of influences working within and without an agency are bound to affect the impact that the evaluation study has on the agency. As a result it is not uncommon to see evaluation studies which are conducted with a fair degree of initiative and insight are frequently ignored or discarded. The authors argue that unless evaluators become more familiar with the complex web of decision making within an agency they can continue to expect to see their evaluation studies largely ignored or generally under-utilized.

In response to the issues that the authors raise regarding evaluation research and the problems it faces, they propose a three dimensional model for evaluation research. As indicated in the figure below, the model involves three levels of activity that are necessary for any evaluation study. The authors argue that the second level of evaluation or evaluative activity is dependent on having adequate development at the lower levels.

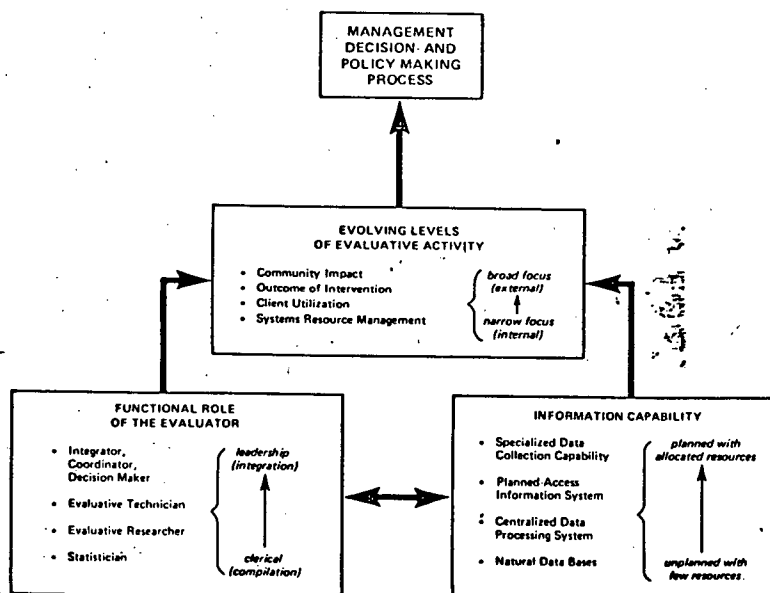


Figure 4.1. The Linkage of program evaluation activities to management decision making as determined by level of information capability and functional role of the evaluator.

Effective evaluation at a given level depends, at least to some extent, upon adequate initial mastery of the lower levels. ... The model expresses our conviction that the effectiveness of evaluative activity depends on appropriate evaluator roles and adequate informational capacity within the organization.⁵⁰

It is important to know that in this model of evaluation the tasks increase in complexity. In each of the three areas of the model the more simplistic tasks establish bases for more complex types of evaluative activity. For example, in the information capability, the information available begins with a natural data base and moves up to more specialized data collection capabilities in the agency. Thus, the movement in the data collecting techniques are from unplanned data collection methods with few resources, to more planned and sophisticated data collection systems with allocated resources for data collection. The development of an effective evaluation program depends upon the mastery of the lower levels of each of the three areas of evaluative activity.

Under the broad rubric of "evolving levels of evaluative activity" the authors specify four specific activities. In order of increasing complexity the activities begin with systems resource management, moving through client utilization, outcome intervention to community impact. Each of these activities represents a movement of an evaluation program from a narrow focused, internal monitoring system to a broad focused, external impact evaluation system.

At the first level of this model is systems resource management, or level one. The first level includes five specific activities that are:

... critical to the program planning and management process:

- (a) assisting the organization to meet minimum standards for human service settings;
- (b) assisting in the formulation of program goals that are based on mandated services of documented needs;
- (c) framing the information needed to set program priorities;
- (d) identifying and allocating resources; and
- (e) translating program priorities into measurable intervention strategies, based on identified or legally mandated needs.⁵¹

At this level of development an evaluation program focuses on the internal regulation of the agency and its ability to meet certain standards of practice and service. The evaluation project would also be faced with the difficult task of defining, in operational terms, the purposes and goals of the agency so that it can identify deficiencies in service delivery that prevent the smooth operation of the agency. This type of evaluation attempts to monitor and assess the degree to which resources in the agency are allocated with respect to stated agency goals and objectives.

At the next level of evaluative activity, client utilization, an evaluative effort assesses the service delivery processes to determine whether or not services are delivered adequately. This type of evaluative study addresses specific activities of the agency in providing services for clients. In addition it attempts to ensure that the agency is appropriately screening clients, adequately planning for clients and providing a continuity of care for clients who return to the agency for ongoing services. In addition the evaluation project must attempt to assess what safeguards the agency has developed to prevent abuse of the agency's services.

An evaluation at this level concentrates on a study of utilization.

At the next level an evaluation would undertake a study of the outcome of agency services or a follow up type study. This type of evaluation is motivated towards providing additional information for decision makers in providing more effective services. Such an evaluation would enable managers or program administrators to make decisions about agency changes, to identify trouble spots or weak spots in the program and to ensure that each segment of the program is operating effectively.

One of the difficulties that an evaluative effort at this level faces is how to determine what is a satisfactory outcome. The definition of success at times can become confusing or poorly defined. Consequently the evaluative effort at this level would have to take particular care in identifying what goals should be defined as acceptable outcome goals.

At the fourth and most complex level of evaluative activity is the community impact study. Here, evaluators attempt to assess the broad effects of programs or services. Such assessments may include the efforts of preventative programs to perhaps reduce drinking-driving or reduce breaking and enterings in a particular area of the city. A second type of undertaking of evaluation at this level might be a regional evaluation designed to identify comprehensive needs of a particular community or area of the community. Finally such an evaluation could also be directed at ensuring that community service programs are integrated in an across-the-region delivery system. This type of evaluation would attempt to ensure that gaps in services do not exist and that current services do not overlap and

provide duplicate types of service. The authors note that this style of evaluation is the most complex and advanced type of study possible.

The authors reinforce their belief that the evaluation techniques described above are dependant on mastery of the lower levels of agency practice. These levels include the development of informational capacity and capabilities in the agency and the roles that the evaluator can assume in each agency. Under the title of Information Capability, the authors raise issues related to the information or data collection systems that exist in the agency. At the lowest level of this continuum of data collection systems is the natural data base. At this level the authors state that there tends to be no centralized or co-ordinated data gathering system within the agency. What tends to happen is that each unit in an organization will collect a wealth of potentially useful information but this information "exists in a disconnected, fragmentary and idiosyncratic form that greatly reduces its relevance to decision making and planning".⁵²

At a higher level of development is the centralized information system which has a much more co-ordinated flow of data from the functional units through a centralized information system. Here an agency has been able to standardize the type of information that it requires and to record it in a uniform manner. The major difference between this and the previous style of information collection is that the agency has made a determined effort to centralize its information collection and to establish a means of recording the information that it collects.

A more complex level is the planned-access information system. At this level of information systems, the evaluator is able to get quick access to

the collected data and analyze it easily. Here, the key is that the data has been collected routinely enough to enable quick access for analysis and data processing. Finally, the data collection system in an agency can reach the specialized data collection stage at which stage data is collected for specifically predetermined evaluative tasks.

At the level of specialized data collection capability, the task is to integrate both quantitative and qualitative information and independently to analyze program strategies with an appreciation for management's critical policy questions. 53

At this fourth stage of data collection capability, the data available for analysis and for quick access for evaluation projects is much greater.

The evaluator can analyze or access data with ease.

A final consideration in designing an evaluation is the functional role that the evaluator will assume at the agency. These roles vary from the simple statistician's role at a basic level to the co-ordinator decision maker and integrator of information. Once again the development of the role of the evaluator begins as a simplistic data collection individual to somebody who takes a much more active leadership role in the development of agency policy.

At the upper end of the continuum of roles that an evaluator can assume is the role of the evaluator as a decision maker. The authors claim that evaluators must be more involved in the decision making process if the information they retrieve from the agency records is to be used and

considered in determining the directions of an agency's service delivery.

When management uses evaluation effectively, a common sequence of events is evident:

- (a) a specific problem area is identified as requiring evaluation support;
- (b) relevant information is gathered and analyzed;
- (c) reports are generated and presented in a form compatible with the management decision process;
- (d) alternative solutions or actions are posed and reviewed by evaluators and administrators ... ; and,
- (e) a decision is implemented.... 54

This article provides a useful summary of an evaluative model which is quite similar to the outline that Ricks provides in her description of evaluation readiness. If the evaluator takes a look at the chart and examines the various levels on each of the three areas of evaluative activity, it is possible to determine the type of evaluation study that is possible in an agency. It would seem implausible to expect to undertake a community style evaluation study when the data base at the agency is still at a natural base level. Consequently this researcher believes that this particular model for evaluation, when combined with Frances Ricks' model, provides a good description of some of the facts that should be considered in developing an evaluation program.

Herbert C. Schulberg and Frank Baker elaborate on two models of evaluation research which they feel are useful to consider. The first is the goal attainment model which places its emphasis on a process of examining the attainment of a program's objectives. In this particular model they note that the greatest emphasis must be placed on the process of defining and

clarifying the program's objectives. If the evaluation researcher is to be able to assess the degree to which the agency has reached certain goals, the evaluator must have very specific definitions of the goals and objectives of the program.

... the goal attainment evaluation process is a circular one. It starts with initial goal setting, proceeds to determine measures of the goal, collects data and appraises the effect of the goal, and then modifies the initial goal on the basis of the collected data.⁵⁵

The authors note, however, that such an evaluation tends to be somewhat limited in its scope. First it views the agency in a very prescribed manner by assessing goals and attempting to determine the specific degree to which the agency has been able to achieve those goals. Second, the evaluator is forced to turn to the administrator for a definition of the goals that the agency is pursuing. As a result, the quantity that goal attainment scaling measures in any agency are the goals provided by and defined by the agency administrator. The authors note that the goal attainment evaluation method seems to be more a stage that evaluation studies pass through rather than a lasting style of evaluation.

The second model of evaluation that the authors describe is the systems model. The systems model adopts a much broader view of the agency and its activities.

... the system model is concerned with: the effective co-ordination of organizational sub-units; the acquisition and maintenance of necessary resources; and the adaptation of

the organization to the environment and to its own internal demands.⁵⁶

While the authors note that this particular style of evaluation can be expensive, it has greater advantages over the goal attainment method. As a result this tends to be the type of evaluation favoured as an acceptable mode of evaluating an agency. It can provide feedback to the agency on its findings and suggest program modifications as opposed to the goal attainment scaling. It can also take a broader view of the agency than the goal attainment scaling can.

These articles have expanded somewhat on Frances Ricks' original articles on program evaluation. In addition to reviewing some of the difficulties that program evaluation faces, in evaluating programs, the last two articles have reviewed a couple of suggested models for evaluation research studies. At this stage it is worth reviewing two further articles which elaborate somewhat on the difficulties that evaluation research faces in approaching an evaluation of an agency.

The first article by Henry W. Reicken entitled "Memorandum on Program Evaluation" sets out to describe some of the difficulties that practitioners of evaluation research face in formulating evaluation programs. Reicken develops the model for evaluation studies which addresses some of these procedural problems.

Initially Reicken identifies four types of evaluation studies that are possible. The first he describes as effect studies which focus on the outcomes of any program. The purpose of effect studies is basically to

determine the degree to which program goals or objectives are achieved through the routine operations of the program. A second type of evaluation study he refers to as operations analysis which is an attempt to analyze the operations of the agency without paying any particular attention to the degree to which it achieves its final goals. The third type of evaluation study that Reicken identifies is a survey of needs which is designed to assess the needs of a community or a population for particular programs. This type of study is often implemented in an attempt to establish the value of implementing specific programs to address specific needs. Finally Reicken describes investigations which perform a type of audit of the program. These types of evaluation studies are frequently met with a great deal of hostility on the part of the agency being evaluated, since it is frequently an attempt to audit the operations of the agency using an external evaluator.

Generally Reicken states that the first three of these types of evaluation can be considered as effect studies. He states that effect studies are the appropriate field for the evaluation researcher to focus on. Operational analysis he feels is an essential stage in any effect study. The survey of needs is in fact a special case of effect study in which the goal is the definition of objectives for a program. As a result, the major focus in evaluation research according to Reicken is on effect studies.

The first major problem that any evaluation program encounters is the process of determining the objectives of the program. He notes that objectives must be clearly defined and also operationally defined to permit measurement of the objectives. Unfortunately the operational definition

or the development of such definitions is frequently the most difficult part of any evaluation study.

Objectives must be stated in advance of the evaluation study. In addition, Reicken states "it is essential to have advance agreement on objectives and on the procedures to be used in appraising their attainment".⁵⁷ It is this important phase of operationalizing the objectives that is frequently overlooked in evaluation studies. A survey of needs can frequently be used for determining the objectives of an agency, Reicken states. By conducting such a survey it is possible to identify whether or not the goals and objectives are being met. In addition this survey will provide a base line for future measurements.

The second technical difficulty that evaluators run into involves the description of the operations of the agency. At this phase of an evaluation project, the evaluator must find out exactly what services the agency is providing in order to achieve its stated goals. As a result the evaluator must provide a factual description of the operation of the agency. This is important for at least one reason when considering the impact of a program. Reicken notes that impact frequently is a result of the type or intensity of agency involvement in a client's life. Consequently, it is important for the evaluator to understand exactly how the agency operates if an evaluation of impact is to be measured. The operations of the agency and the availability of staff time to provide services to clients will definitely affect the outcome of the project. Consequently, if the evaluator does not have an adequate understanding of the agency's operation it will be impossible to make any reasonable assessment of the impact

that the agency program has.

A third technical difficulty encountered in many evaluation studies is the measurement of effects. The crucial problem here is to develop methods of measuring change in subjects and conversely to establish methods of establishing that these changes are in some way related to the actions of the program and its staff. Evaluators frequently attempt to use one of three types of evidence in providing an assessment of the impact of a program. These types of evidence are in fact poor substitutes for valid data collection procedures.

The first type of substitute in evidence is the use of an expert who provides a judgment on the effectiveness of the program. Unfortunately, this does not provide information on the biases of or methods used by the expert in making his assessment about the program's effectiveness. A second method that evaluators use to provide evidence about program effectiveness is the use of incidents or case reports. Here evaluators may attempt to use selected case studies as evidence of program effectiveness. Unfortunately this technique lacks comparability between the case reports and puts a great limitation on the ability of the evaluator to generalize the results to the balance of the population. Finally, some evaluators attempt to use testimonial letters which cite the value of the program. This is the least useful method of evaluating a program. The author notes that such reports are seldom written by people who are dissatisfied with the program. Consequently such testimonial letters are more frequently positive than perhaps should be the case.

A fourth difficulty that evaluation studies face is the establishment of a baseline for measurement. Reicken notes that in order to establish change in an individual it is necessary to establish some baseline measurements with which to compare subsequent measurements. This need is frequently overlooked in evaluation studies simply because the agency is eager to get on with the study or the collection of pre-measurement data adds additional expense to the cost of the evaluation program.

One of the problems establishing a baseline measurement is the question of pre-treatment measurement and its effects on the problem itself. Reicken notes that very little is known about the effects of pre-treatment measurement. He states that it is still important to establish some baseline measures with which to compare subsequent measurements. Here, the evaluator frequently runs into problems where baseline measurements may have been taken, but are inadequate for subsequent comparisons. It is frequently very easy to take measurements which do not collect all the data necessary for subsequent comparison simply because the evaluator is unaware of the types of information he might need for a subsequent comparative study. Where baseline measurement is not initially established Reicken notes that the evaluator is sometimes forced to depend upon retrospective reports in an attempt to establish a baseline for subsequent comparison.

The control of extraneous variables is another difficulty that evaluation research faces. The traditional model of a control in an experimental group is frequently not possible in a social service agency. In addition, for broad base community programs, it is not possible to establish a control group because such programs are frequently aimed at an entire

community where there would be no group which is not affected by the program itself.

A final difficulty that program evaluation research faces is the problem of detecting consequences that were not anticipated in the original design of the agency program. Reicken notes that if the evaluator is intuitively very familiar with the program and its goals that such unanticipated consequences may be more observable to the evaluator. In addition he feels that if program goals are clearly stated and the activities of the program are outlined fairly concisely such unanticipated consequences would not occur or would not go unobserved.

Reicken also explores the relationship between the evaluator and the program staff. He outlines a number of the advantages and disadvantages for independent or inhouse evaluators. Initially he notes that the use of an internal or agency evaluator reduces staff resistance to the evaluation program. By using such an inhouse evaluator staff are not as threatened as with an outside evaluator who comes in to look at their program. The use of an inhouse evaluator saves a great deal of time in that the evaluator does not need to be acquainted with the agency's program. Finally the use of an inhouse evaluator provides a mechanism for feeding back the information to program staff.

On the reverse side of the coin the outside evaluator can maintain much more independence and objectivity in the study of the agency. Since his connections with the agency are at best tenuous he is unlikely to become over-identified with the agency or the services it provides. As a result

a much more thorough study might be possible.

A second consideration in the use of an outside evaluator relates to the time spent in orienting the evaluator. Reicken argues that this time is in fact not lost because it is a profitable time during which the evaluator and the agency may identify additional ideas for research. The use of an outside evaluator might identify areas of the program which regular staff have not thought of evaluating in the past.

A final benefit of an outside evaluator is his greater movement or freedom in the agency. The outside evaluator has the advantage of being a stranger in the agency and as such will not be branded as a member of any one political faction or group within the agency. Consequently, this may benefit the evaluator in obtaining information that would not normally be provided to other factions within the agency.

As a conclusion it is worth noting in Reicken's article that he once again combines a number of types of research into one more specific category. Like many of the previous suggestions about the nature of evaluation research, Reicken categorizes effect research as part of the process of evaluation research. Under the general term effect studies he notes that operational analyses and survey of needs can be seen as parts of the overall effect type study. In addition the problems that Reicken cites would be problems for any type of evaluation study, whether it falls into one of the four categories he presents or to any of the categories that previous authors have suggested in describing evaluation research studies.

Carol H. Weiss contributes further information about the problems that evaluation research faces in her article "Evaluating Educational and Social Action Programs: A Tree Full of Owls". She itemizes seven particular problems that evaluation researchers⁴ must address in developing a program of evaluation research. Each of these in some ways expands upon some of the issues by Reicken.

First, Weiss identifies the problem of adapting evaluation research techniques to the actual environment. She notes that programs do not exist in a vacuum, but exist in real life. Consequently, when an evaluation is undertaken it is not the evaluation that is the primary activity in the agency but the delivery of services. Consequently the strategies for evaluation research must be adapted to working within the realities of an ongoing, developing program.

A second problem which has already been identified by Reicken is the problem of program goals. She notes that these goals are frequently very diffuse and general in nature. Consequently the evaluator is faced with the problem of having to establish articulate and clear statements of the specific goals of the agency.

A third problem which expands upon Reicken's discussions about the use of internal and external evaluators is the reluctance of staff to co-operate with an evaluation effort. She notes that initially evaluators and service delivery staff have different objectives. The evaluator is attempting to collect information on the effectiveness perhaps of a program while staff

are more concerned with the delivery of service. As a result staff frequently see evaluation as a disruption in the routine provision of services. Consequently, if staff feel negatively towards the evaluation, their involvement in evaluation may have a negative effect on the collection of data in the evaluation program.

A further obstacle that evaluation research faces is the use of control groups which Reicken mentions briefly in his article. Control groups are frequently not available since the evaluator cannot frequently assign individuals to control and experimental groups or cannot identify groups similar to the group being studied. The use of control groups is frequently not feasible. As a result, Weiss suggests that a second type of procedure is an attempt to match individuals on the basis of characteristics that seem to be relevant to the outcomes or goals of the program. She states that even where controls are available or where subjects are matched it is difficult to maintain them and prevent contamination through exposure to the program or other variables. Other factors may induce changes in the controls and make them less than equal comparison groups for the experimentally treated individuals.

The fifth problem that the evaluator faces is the fact that programs are seldom simple entities. She notes that programs are complex both in content and method. In addition to the complexity that exists in the program, the program is frequently developing and changing through the process of evaluation. Consequently the evaluator faces the difficulty of dealing with a very complex and elaborate program when addressing questions of

assessing its effectiveness.

Weiss claims that evaluation studies can only be completed after the program has gone through at least one complete cycle of its treatment process. To be an adequate study of outcome effects the program should go through this cycle without major innovations being introduced into the program methods. This again is the problem of program change over time, and the difficulty that the evaluator faces in asking staff not to 'improve' on the program while the evaluation is underway.

The seventh and final difficulty that an evaluator faces in developing an evaluation of an agency is that evaluation research is meant to provide information for program improvement. Here Weiss notes that many evaluation results, however, have not been used. Once again she emphasizes the complexity of the decision making process and other factors which impinge upon any decision. However, she notes that part of the responsibility for improving the utilization of evaluation research rests with the evaluator. Evaluators seldom present administrators with clear-cut decisions or options when presenting their studies. Negative reports tend not to provide the decision maker with any directions for future change in the program or program improvements. In addition evaluators frequently do their research injustices by providing complexly worded research reports. At the end of an evaluation project the administrator is faced with the prospect of having to weed through a report to interpret what actions might be appropriate to alter or improve his program. The tendency, of course, is to avoid having to deal with such difficult material and to proceed on one's

previously established modes of decision making.

The decision-maker is rarely presented with clear and unambiguous direction, and his reluctance to leap into uncharted waters is understandable. Particularly when he has to dredge implications for action out of a long, murky report, he may fail to consider seriously even those findings that do offer guidance for change.⁵⁸

Weiss provides support for some of the difficulties that evaluation research faces in evaluating programs. She re-emphasizes some of the previously mentioned issues about the problems of decision making and the utilization of research findings. A further article entitled "Utilization of Evaluation: Toward Comparative Study" is one in which Weiss further expands upon the problems that evaluation research has encountered in implementing its findings. To overcome these difficulties she suggests three specific elements that evaluation research should include in its reports. First she notes that evaluation research should provide an "explication of the theoretical premises underlying the program, and the direction of the evaluation to analyze these premises".⁵⁹ She states that an evaluation should select a number of these theories or notions and concentrate on studying those particular theories. Rather than look at the agency as an entire entity, it may be better to look at specific areas of the agency's program and evaluate those on the basis of clearly explicated theoretical premises and a clear description of the process used to evaluate the outcomes. She claims that this particular approach to evaluation will provide an initial test of the notions being employed by the agency and give some indication as to the degree to which that concept could be generalized to other agencies. This type of evaluation is much more useful since it

provides a study of specific concepts rather than a study of specific outcomes of one agency. The concepts can be generalized to other agencies. The outcomes of one agency are much more restricted in their applicability to other agencies.

A second area that evaluation research should consider is the process of the agency. By providing information on the process or operational directions of the agency, the evaluator has a greater likelihood that his results will be used by other agencies interested in developing similar processes. She states that this description of the links between various parts of the program allows the evaluator to test the reliability or validity of those links between the stages in the program.

Finally Weiss argues that if evaluation research wishes to be used more frequently it should provide an analysis of the effectiveness of various sections or components of the agency. She notes that when making decisions, decision makers frequently are not making decisions between having a program or not having a program but instead are making a decision between smaller options. By analyzing components of a program the evaluator can provide information on specific areas of the program that might need modification. If, on the other hand, the evaluator opts to evaluate the entire program the only decision he provides the decision maker is whether the results satisfy the continuation or closure of the program. The study of the components of a program, however, provide the evaluator and the decision maker with more areas for modification or revision in services.

Weiss also outlines four other areas of evaluation research that hold promise for increasing utilization of evaluation studies. If the evaluator

is quick to identify in the initial stages of the evaluation project the potential users of his results, and selects concerns related to them, the outcome will be greater utilization of his studies. A second technique to increase utilization is to ensure that administrators and program practitioners are involved in the development of the project. This should move the image of evaluation from the role of spy in the agency to the role of collaborator in increasing program effectiveness. A third potential means of increasing the utilization of evaluation research is for the evaluator to be quick in releasing his outcomes and results. While the reports may be of a preliminary nature the simple fact of feeding results to the agency will encourage further follow up studies on the program. Finally she suggests that it is important to present results in an effective and approachable research report. Once again she hints at some of the earlier concepts authors have suggested regarding providing information for decision making. The obscure or highly academic report is of limited value to an administrator faced with the problems of making practice decisions. The decision maker does not have time nor the training to sift through such academic exercise in an attempt to determine the validity of the study and its implications for his particular agency.

As a final comment on the literature on evaluation research, it is worth reviewing Leonard Rutman's book, Evaluation Research Methods: A Basic Guide in which he provides an outline of how to approach the development of an evaluation project. In this book, Rutman identifies a number of the issues previously identified through the literature. In addition he provides a guide to the processes that an evaluator should undertake in preparing to evaluate an agency.

Like many authors before him, Rutman provides a definition for evaluation research. In it he identifies four specific items which should clearly be part of any definition of evaluation research. First he identifies the use of scientific methods as an important part of the evaluation research process. He notes that generally evaluators attempt to conform to some standards of scientific research in approaching the evaluation of a program. He emphasizes that it is important to approach the highest degree of scientific research as is possible. Within this framework of the scientific method it is possible to maximize the validity and reliability of the study's findings and thereby create a more useful research project.

A second important focus that Rutman identifies in evaluation research must be a statement which links the activities of the program to producing the results. He notes that it is important to be able to connect program outcomes with program processes if the research project is to be at all meaningful.

If evaluation research is to shed light on factors that succeed or fail to produce measured results, then special attention must be paid to the program components and processes and not solely to the outcomes.⁶⁰

It is the process of identifying the program in operational terms that is an important part of the evaluation study. The evaluator must be able to identify the components of a program that produce observed results. Rutman states that this is important for two reasons. First it is important to be able to describe the program's operation and determine whether it was implemented in its intended form. Secondly it is important to be able to

operationalize the processes in the program if the evaluator is to be allowed to make any inferences about the outcomes from the program.

Rutman argues that evaluation research should not restrict itself to the goals. It is important for the evaluator to consider unintended goals or consequences of a program. Rather than being confined to the stated goals, the evaluator must pay attention to other results created by the operations of the program.

The final consideration which authors before have cited is the consideration of the informational needs of decision makers. Once again, Rutman emphasizes the need for evaluators to provide information that is of use to decision makers. In fact, he quotes the Alkin study mentioned earlier and re-emphasizes the need for providing information in a useful summary that allows decision makers to select alternatives.

In summary, the proposed definition of evaluation research, like most other definitions, places major emphasis on the use of generally accepted scientific procedures to collect reliable and valid data. This definition stressed that evaluations should focus on program processes, and not merely on effects or outcomes.⁶¹

Rutman notes that there are three specific pre-conditions that are necessary prior to the evaluation of a program. These pre-conditions, if they are missing or inadequately developed, will prevent an adequate evaluation of any program. Consequently in looking at a program for an evaluation research project it is important that the evaluator keep in mind specifically

the following three items:

1. A clearly articulated program;
2. Clearly defined goals;
3. Rational linking between goals and effects. 62

Rutman distinguishes the clearly articulated program as an important part of the pre-conditions for an evaluation program. He states that the program must have an accurate definition of its goals and purposes. Unless this is present it will be impossible for the evaluator to connect any outcomes with any activities of the program. Rutman believes that the articulation of the program provides an ideal description of the service to be offered. He also notes that it is important to realise that the program may often not be implemented in the manner described in its statement of purpose. While there is no guarantee that the ideal description of the program will be the reality of the program as it operates, Rutman insists that an articulated program is essential for an evaluation study. Once a program is clearly articulated it is possible to conceptualize the program in measurable terms that the evaluator can collect data on. Without this it will be impossible to assess to what degree any outcomes are as a result of the program's operations.

The second pre-condition for program evaluation is that the program have clearly specified goals or effects. Here Rutman feels that it is common to find goals that are vaguely stated or stated in global terms. The importance of having these goals clearly specified is that the goals provide the criteria for measuring the success of the program. If the goals are

not specified in clear terms they cannot be operationalized and consequently the evaluator will have difficulty in assessing the degree to which a program has reached its goals. In addition the process of identifying and specifying the goals of the agency will prevent the evaluator from missing any crucial variables that may be worth analyzing in the evaluation process. It is also important for the evaluator to identify latent goals as well as the specified or anticipated outcomes of a program. While Rutman admits that such a global approach to an evaluation study can create a problem of generating too many variables, he feels it is important to approach evaluation from this perspective and that subsequent setting of priorities can reduce or eliminate a number of the more global goals identified at this stage of the evaluation process.

Finally, Rutman discusses the linking rationale or the rationale that the agency has developed for explaining the reasons why certain outcomes can be achieved by specific agency processes. At this point in the preparation for an evaluation study, Rutman notes that it is important for the evaluator to consider whether or not there is any link between program efforts and program outcomes. The evaluator must also consider the initial problem of the client group to determine whether or not the program's response to that particular problem represents an appropriate response. By considering the linking rationales between stated goals or desired outcomes and the agency's processes or treatments, the evaluator will be able to determine whether or not there is any logical argument supporting agency statements that their program produces the observed outcomes. By examining the linking rationale it will be possible to identify the programs which lack or have poorly conceived rationales for linking the observed changes in client behaviour with

the agency treatment modality.

Once the evaluator has satisfied himself that these pre-conditions exist in the agency he is able now to move onto the next phase in the preparation for an evaluation. At this phase Rutman identifies two particular activities that the evaluator must become involved in. The first he terms the evaluability assessment which involves "the examination of program documents and discussions between the evaluation researcher and program personnel".⁶³

The main thrust of the evaluability assessment is to analyze the decision making system that will be the benefactor of the evaluation study. In addition the evaluability assessment should identify the questions to be answered by the evaluation study. This process involves a number of specific steps which Rutman briefly outlines. First he states that the evaluator must identify the users of the evaluation study. Next the evaluator should collect information about the program's activities, objectives and the assumed relationships or casual relationships between these activities and the program's intended outcomes. The third step involved in preparation for an evaluation is to develop a rhetorical model of the program which describes the theoretical linkages between the outcomes and program processes. Finally the evaluator must attempt to determine how accurately the rhetorical model reflects the actual state of the program.

Once the evaluator has gone through this process he is able to move on to the second important pre-evaluation or evaluation preparation process, which is formative research. Rutman defines formative research as "a strategy for collecting data about the program's operations as a means of

further identifying and elaborating each of the pre-conditions".⁶⁴ Rutman states that it is important to conduct the formative research process in addition to the evaluability assessment for a number of reasons. While evaluability assessment may produce an understanding of the program according to the program managers, the formative research process will verify that their understanding is correct. An evaluability assessment may reveal some of the difficulties that managers have in conceptualizing some of the necessary pre-conditions for an evaluation study. The formative research procedures will provide a check on the accuracy of these individual's perceptions of the program. The formative research process will provide information on the operation of the agency's program and provide initial feedback for decision makers in changing or improving agency operations to meet its goals. Finally, the formative research procedures will assist in discovering latent effects that were not identified in the evaluability assessment phase of the preparation for evaluation. Formative research can also provide information on different methods of implementing a program in order to develop it or modify it.

In the second chapter of Rutman's book, Joseph S. Wholey proceeds to describe the evaluability assessment. Wholey notes that the first stage in evaluation design is the clarification of questions to be answered. The evaluability assessment, thus, is that process which refines the evaluation program's scope in terms of the needs of both the evaluator and the user or decision maker.

The first stage that Wholey identifies in the evaluability assessment is the "bounding of the problem". The step here is to identify the users of

the planned evaluation. In addition the evaluator must attempt to determine which of the program's activities are mandated through legislation. When a program is to be evaluated, Wholey asserts, it is reasonable to ask questions about whose goals are being met or who defined the goals.

The next phase in the evaluability assessment is the collection of information about the program. Here, the evaluator must look at agency documents and legislation, and conduct interviews with members of the agency to develop a definition of the program. At this phase of the evaluability assessment the evaluator would also be attempting to describe the casual links that the agency assumes exists between its activity and the objectives or goals of the program. Through this process the evaluator should be able to develop a model indicating the relationship of the staff and resources to the objectives of the agency. The flow model along with the interviews and information he obtains from the staff should provide the evaluator with a clear understanding of the operations of the agency.

... these interviews being conducted to help the evaluation planner to become clearer (more specific) on

- (a) the primary users of the information to be obtained,
- (b) the users' priority information needs, and
- (c) their degree of satisfaction with existing information sources and prior evaluations.

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Once the evaluator has gone through this process of collecting information about the agency it is possible to develop a program model. The model should graphically represent all the activities of the agency. The model provides a quick and easy means to relate the various component parts of the agency

or the agency's program with its activities and objectives. The program model provides the researcher with a visual description of the entire activities conducted at the agency in relationship to the stated goals.

The next phase in the evaluability assessment Wholey describes as the analysis. At this point the evaluator has two basic objectives or tests that he should apply to his rhetorical model or description of the agency. First of all the evaluator must determine whether or not the objectives stated by the agency and shown in the rhetorical model are stated in terms that are measurable. The second test that the evaluator must apply is whether or not the assumed causal relationships between the various elements of the agency are testable. The definition of measurable refers to the fact that the agency must have some definition of what can be considered as a success. In defining success, the evaluator must be provided with an indication of achievement or success by the agency and a means by which the success can be verified. For example in the mental health program the indicator of some achievement on the part of the program staff might be that the individual's social functioning has improved requiring less psychiatric intervention. The means of verifying this particular measurement of success would be to examine hospital or community mental health records to determine how the individual is functioning in the community. It is important that the policy makers or the agency define the terms of success and not the evaluator.

The second part of the analysis must consider the assumed relationships between the objectives of the program and the processes that the program uses to obtain those objectives. If the evaluator is to provide feedback

on the agency program he is going to have to demonstrate that the processes used are in fact the mechanisms of intervention that are causing changes in the individual.

Taken together, the manager or policy maker's definition of measurable objectives and testable assumptions constitutes his best statement of the evidence he needs to determine whether the program is or is not effective. It is important to note that we are seeking the user's definition, not the evaluator's.

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Once the evaluator has completed this analysis it is possible to begin the development of an evaluation program. The evaluator is now able to define the information that he will need to collect on the basis of the rhetorical model to make conclusions about the program and its effectiveness. He is able to identify the types of information that he will be able to collect and present to the manager.

Next Wholey outlines the last phase of the evaluability assessment which he calls the presentation to management or the intended user of the evaluation. He notes that up until this stage the representatives of the agency will have contributed a great deal of their time to the assessment of the program. At this stage it is the evaluator's turn to present to the program managers what types of information he will be able to collect and to define the type of evaluation he will be undertaking. The evaluator must present four items to the manager, Wholey claims. He states that the evaluator must present the rhetorical model of the agency. The evaluator must also present the evaluable model or an outline of the operations of the agency that can be evaluated. The evaluator should also present an explanation

of his analytical process that led to the development of the evaluable model. Finally, the evaluator should present the information that he can collect in relationship to this evaluable model.

The aim of presenting this information to the agency's decision making group is to obtain further clarification from them on the program design. It offers the decision maker an opportunity to clarify for the evaluator any objectives or questions about the design of the evaluation project. In addition it offers the program's decision making group an opportunity to specify any further needs for information. The evaluator is able to respond to any suggestions with suggestions as to how this additional information might be collected. The decision maker is now able to make a decision about whether to proceed with the evaluation or not. Finally the evaluator requires from the decision making group some indication of whether or not this group perceives a need to change or modify the current program. This decision will of course affect the process of evaluation.

Having completed this evaluability assessment period it is now possible to move on to the second stage of the preparation for evaluation, which is the formative research process. Leonard Rutman outlines this process as the second stage in the preparation for evaluation. The formative evaluation stage provides the evaluator with information regarding the accuracy of the program model that has emerged from the evaluability assessment. The formative research phase offers the opportunity to identify further information which did not occur to the evaluator during the evaluability assessment. Finally the formative research process can be used to clarify or resolve any uncertainty about the program to be evaluated.

Specifically the formative research process pays attention to three particular areas of the program. First of all it is interested in identifying and defining program activities. It also is interested in identifying the effects that the program has on the participants. Finally it is concerned with the causal assumptions or the assumptions that the program makes about the relationship between its activities and its supposed outcomes or effects.

Under program activities the formative research phase of the program evaluation project attempts to develop a clear understanding of the activities conducted in the program. Rutman notes that the evaluability assessment should identify the major activities in the program so that the formative research process can work on developing a clear understanding of how these activities are actually implemented in the agency.

In other words, through data collection on the actual operation of the program, it is possible to shed light on the activities that are implemented.⁶⁷

In attempting to clarify the effects of the program, the formative research process can be used to determine both intended and unintended effects of the program. Rutman feels that formative research is in fact a process of discovery while the actual evaluation project is a process of verification. Consequently the formative research phase of the evaluation process is intended to look at actual effects of the program on its clients. Finally, formative research must address the causal assumptions that are made about the interrelationships between the effects produced by the program and the apparent activities in the program leading to those results.

In describing the formative research process Rutman identifies it as a process of discovery and claims that it relies clearly on a process of induction as opposed to any more formal style of scientific research. It is not a research process, but part of the examination of an agency prior to the actual introduction of an evaluation research study. Since the formative research process does not attempt to determine the success or failure of the program, Rutman notes that it is unnecessary to use any experimental or similar scientific research designs. It is not attempting to reach any conclusions about the program other than verifying some of the information collected in the evaluability assessment about the program.

In this role formative research can be used to increase the evaluability of a program by "(1) identifying factors that appear to influence the program's operation and effects; and (2) allowing managers to try different methods of implementing a program and observing the effects of each alternative".⁶⁸ Thus, Rutman notes, formative research is important as a pre-evaluation phase in the preparation for an evaluation. While evaluation is concerned with the measurement of effectiveness, formative research is concerned with a process of exploration and discovery. Now the evaluator is ready to conduct his evaluation project. He has identified some of the processes and assumptions about these processes in the agency and has presented to the agency's management the feasibility of providing an analysis of the agency's operations. The evaluator can now design his program with the knowledge that the members of the agency staff or decision making body are fully informed about what is feasible and what to expect from an evaluation of their agency. The processes in the evaluability assessment and formative research phase provide the evaluator with a clear

understanding of what exactly the decision makers of the agency want from the evaluation project. This, of course, will increase the likelihood that the evaluation's results will be used by decision makers in changes in agency policy or procedures.

This concludes the major portion of the literature review with respect to the evaluation literature. This part of the literature review has attempted to identify some of the factors that should be considered in planning an evaluation or in evaluation research. In addition to these general characteristics of evaluation it is worth examining three articles specific to this evaluation project. The first is Merton's Focused Interview, followed by an article on the durability of innovations in agencies and the problems in evaluating agencies through self reports. These articles will provide some insight into the rationale behind the examination of the agency through the aided recall process.

The summary of Robert Merton's book The Focused Interview will be brief. Basically in it Merton argues that it is possible to obtain statistically significant information from participants in a particular program through the focused interview process. While this process was not used entirely as developed by Merton in this research project, it did provide some guidelines for developing the questionnaire.

First Merton notes that one of the purposes of the focused interview is to "focus on the subjective experiences of persons exposed to a pre-analyzed situation in an effort to ascertain their definitions of the situation".⁶⁹ While the topic of Merton's particular book is the examination of some mass

media effects on individuals, the techniques used were useful to the development of the questionnaire and the manner in which it was presented to staff. While Merton asserts that the focused interview must be non-directive in its approach to the interviewees, this research project opted for a pre-determined series of questions requiring only fixed responses. Merton feels that the focused interview should be unstructured with a free response available as this provides the interviewer with the greatest range of possibilities of obtaining new information on a particular process.

The important part of the focused interview process is that it involves retrospection on the parts of the interviewees. By retrospection Merton refers to the individual being asked to recall some of his immediate reactions to an experience and to report it back to the interviewer. To do this Merton describes a number of techniques that can be used to encourage individuals to think back in time to reflect about the effects of a particular event on their lives.

First, Merton describes the process by which the interviewer can re-present some of the original situation to the interviewers. The purposes of the re-presentation is to help the interviewee to recall his experiences in order to "facilitate detailed reporting of his responses" ⁷⁰ to the situation. In addition the re-presentation of the material also focuses the interviewee's attention on a particular event. The re-presentation also provides the group interviewees with a common frame reference.

By thus seeing or hearing the original stimulus again, the interviewee is helped

to recall his reactions to it. The re-stated stimulus, it seems, helps reinstate the experience, which can then be more fully reported..⁷¹

A second technique that the interviewer can use is verbal cues by encouraging the individual to think back or remember or recall his experience. These techniques are useful in helping the interviewee remember his specific experiences of an event.

In developing the questionnaire for the agency, the influence of Merton's work is obvious. First of all this researcher opted to use many statements which require the interviewee to think back, or remember or recall their experiences of the introduction of the evaluation project. In addition, this researcher made use of excerpts from the original reports that the evaluator wrote and circulated among staff. It was hoped that through these reports and through encouraging the interviewees to recall early 1977 or 1978 it would be possible to obtain statements from them on a structured scale as to their feelings about the introduction of program evaluation in Children's Foundation.

The validity of this type of evaluation research was supported in part by George S. Howard in his article "Response-Shift Bias". In this article Howard notes that self report data which is retrospective in nature can be used as another sensitive measurement of "a subject's perspective of personal change"⁷² over time. While this type of research has a number of difficulties related to it, Howard still feels that it can play an important role in the evaluation of program outcomes or treatment outcomes.

Our general hypotheses were:

- (a) subjects' conventional pre-treatment self ratings would be inaccurate and
- (b) following treatment, subjects' increased understanding of themselves and the constructs to be rated would lead to a more accurate assessment of their pre-treatment levels of functioning.⁷³

As a result, the authors are able to suggest that retrospective self reports are useful in evaluation research. Howard states that the results obtained on a retrospective measurement of programs tend to be subject to a reduced bias on the part of the interviewee. As a result some of the data obtained from retrospection provides a better picture of the states of individuals before the administration of treatment. Consequently the authors provide some support for the use of a retrospective method of analyzing the staff at Children's Foundation's feelings about the introduction of program evaluation into their agency.

The final article worth considering is the article by Glaser and Backer on the durability of innovations in agencies. While the article specifically addresses the durability of goal attainment scaling systems in a variety of agencies, the variables it proposes to use in analyzing the survival of goal attainment scaling are useful to the evaluation project itself. As indicated earlier in Chapter I a number of the dimensions used to assess staff's feelings about the evaluation program were adopted from this particular article. In this article the authors are able to reach six basic conclusions which are worth elaborating. First the authors note that where programs are well integrated into the routine operating procedures of an agency, they are more likely to survive. This has implications for the

evaluation project at Children's Foundation. By becoming an integrated part of the data collection system at the agency it is possible to see why the evaluation project has managed to survive the number of years it has. A second factor that the authors note is that programs survive where they are recognized as valuable or needed. Where the agency identifies a need for such a program, it is more likely to survive the test of time. Another contributing factor to the survival of programs in an agency is the ability of a program to modify or make modifications over time according to varying circumstances in the program. Where the individuals who initially support and develop a program are available over time to continue to support and push for the existence of the program, the program is likely to continue. A fifth element that the authors identify as being important to the survival of any program is the involvement of the staff in discussing the pros and cons of the particular project. Finally in relationship to specific program evaluations based on goal attainment scaling Howard identifies staff values similar to those of goal attainment scaling as being important to the survival of goal attainment scaling procedures. This particular element is probably less influential in the Children's Foundation since goal attainment scaling did not survive in this particular agency.

The conclusions reached by these authors relating to the survival of innovations in a program are useful to the understanding of the evaluation project at Children's Foundation. Generally, it is worth noting that the authors were able to reach a number of conclusions about the survival of goal attainment scaling programs in agencies. It is the feeling of this researcher that these same factors contribute towards the survival of program evaluation within Children's Foundation. As a result, in the data

analysis part of this research project this researcher will attempt to make comment on these particular dimensions as they existed in Children's Foundation and as they contributed towards the survival and continuance of the program evaluation project.

Basically, this concludes the examination of evaluation research literature with reference to the Children's Foundation's evaluation research project. It is now possible to move on to an analysis of the data collected through the staff questionnaires and an analysis of Doyle Clifton's reports to the staff at the agency. This analysis will now be able to draw on some of the conclusions and suggestions reached during the survey of the evaluation research literature. Hopefully the review of the literature will contribute towards a better understanding of some of the experiences that staff had during the development of the evaluation research project at Children's Foundation.

FOOTNOTESC. Literature Review

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73. IBID., pp. 95 - 96

D. The Analysis of the Survey Data

The analysis of the survey data collected through this research project involves a dual analysis. First, the results are analyzed individually, statement by statement (a univariate analysis). This univariate analysis provides a descriptive outline of the staff responses to each specific statement in the questionnaire. Next, this project presents an analysis of staff responses as compared by occupational groups (a bivariate analysis). This bivariate analysis allows this researcher to comment upon the significance of staff responses to each statement in the questionnaire with respect to the twenty research hypotheses developed by this researcher in Section A of this research report. This second analysis also involves the use of the Kolmogorov-Smirnov Two-Sample Test of significance to determine the significance of any trends that appear in the data.

This researcher is interested in establishing the degree to which staff expressed their commitment or resistance to the agency evaluation project.

This researcher also wants to measure the degree to which staff felt involved in the development and implementation of the evaluation project at the Children's Foundation. This analysis involves an assessment of staff feelings about the five variables that this researcher developed for this study.

Initially, the Children's Foundation had seventeen staff members working with the agency who were present at the time that the evaluation project began at the agency. These seventeen staff appeared to be potential candidates for this research project, however, once this researcher had an opportunity to examine the completed questionnaires, three staff members were removed from the sample for analysis. One staff member joined the agency shortly after the evaluation project began and as a result could not respond to some of the statements. The other two members of staff were removed from the sample because they were the only two individuals in their respective occupational categories. Since this research project places an emphasis on the occupational group to which the staff member belongs, these two staff could not be used since they represented such a small sample size. As a result of these three exclusions, the final size of the sample was fourteen in two occupational groups - four supervisory staff and ten child care staff.

For the purposes of the comparative analysis, a number of staff responses to the statements in the questionnaire are reverse coded. For the reverse coding process, the categories "strongly agree"/"strongly disagree" and "agree"/"disagree" are paired and the scores obtained for these categories are reverse scored. The importance of the reverse

coding procedure is that to analyze the data for the research hypotheses, all the material must be coded in one direction. This researcher opted to have a higher score on the questionnaire represent a less positive response to the evaluation project.

As an example, where statements are negatively worded and an individual agrees with this negative perception of the evaluation project, this indicates resistance to the project. In the case of Question 3, should the respondent feel that the evaluation project does represent a disruption to the agency, then he would "strongly agree" with this statement and circle a 1 on his response sheet. This response, however, reflects a negative view of the evaluation project and should be reverse scored. The reverse coding process assigns this response a score of five (a higher score to represent this more negative view of the evaluation project) instead of a score of one. The reverse coding of individual questions, thus, allows the computer to analyze the data, compute compound scores by occupational category and establish a frequency distribution by occupational group.

This researcher developed two computer programs, copies of which are in Appendix 10, to perform these two analyses - the univariate analysis based on the raw data and the bivariate analysis based on the reverse coded data. For the comparative analysis a total of eighteen statements in the questionnaire are reverse coded. These questions are question numbers 3, 6, 13, 15, 17, 18, 31, 32, 33, 34, 36, 37, 44, 47, 49, 52, 53 and 71. An additional three questions are routinely assigned scores of

zero since these three questions, questions 67, 68, 69, proved problematic during presentation to staff at the group interviews. (These questions are commented on during the analysis of the individual questions).

The analysis of the data collected on staff reactions involves the use of the Kolmogorov-Smirnov Two-Sample test. This test is designed to determine whether or not independent samples are drawn from the same population. The test measures differences in the distributions between two samples, and determines whether the two samples are from the same population or different populations.

A number of the hypotheses presented in Section A of this chapter relate to the differences in perceptions between the various occupational groups at the agency. Consequently, it is important to determine, should differences exist, whether or not such differences are statistically significant. The Kolmogorov-Smirnov test identifies these differences and determines whether they are large enough to indicate a significant difference between the two samples.

The application of the test is relatively simple. It involves establishing cumulative frequency distributions for the two sample observations or populations. The scores from both groups are arranged in cumulative frequency distributions for the two samples using the same intervals for both distributions. Once this frequency distribution is available, it is possible to determine the largest frequency difference between the two

samples. The Kolmogorov-Smirnov test operates on this difference and determines whether this difference is sufficient to indicate that the two samples are drawn from the same population or from different populations.

When using this test, it is important to remember that the significance of D (the largest of the differences in the cumulative frequency distributions) depends on the size of the sample and the nature of the alternate hypothesis. In the case of the Children's Foundation, with only fourteen subjects available, the calculation of the significance of D involves the use of the following formula:

$$\chi^2 = 4D^2 \frac{n_1 n_2}{n_1 + n_2}$$

where the distribution approximately equals the chi-square distribution. The only disadvantage of this test with samples smaller than forty cases is that it is conservative.

The above formula determines the chi-square distribution for the samples and this in turn answers the question of whether or not the difference in the frequencies is large enough to be significant. If the populations are the same, then the differences may be small and can occur by chance alone. If, on the other hand, the differences are large then D will be significant and the two samples are not from the same populations. In other words, the use of this test helps determine if the child care staff

and supervisory staff shared similar opinions and feelings about the evaluation project. The hypotheses developed in Section A of this Chapter suggest that in fact they did not share similar feelings about the project on a number of factors.

The use of Kolmogorov-Smirnov provides this researcher with a means of determining whether the differences that exist in the occupational group-responses are significant enough to assert that staff had different feelings about the evaluation project. This test allows this researcher to demonstrate that these differences do exist and are significant.

If the two samples have in fact been drawn from the same population distribution, then the cumulative distributions of both samples may be expected to be fairly close to each other, in as much as they both should show only random deviations from the population distribution. If the two sample distributions are "too far apart" at any point, this suggests that the samples come from different populations. Thus a large enough deviation between the two sample cumulative distributions is evidence for rejecting H_0 . 1

For example, Hypothesis 1 suggests that the degree of resistance varies according to occupational group. This researcher can determine whether staff responses on the statements relating to resistance reflect any variance by occupational grouping. Kolmogorov-Smirnov makes it possible to determine if differences exist between the responses of the child care workers and the supervisory staff in relationship to the concept of resistance to the evaluation project. The test enables this researcher to accept or reject Hypothesis 1 based on the analysis of the differences between the responses of these two occupational groups.

a) Results: Univariate Analysis

Questions 1 to 6 are prefaced with an introductory quote from Doyle Clifton's March 28, 1977 progress report to the staff at the Children's Foundation. In it, he indicates that the purpose of this first report is to "pull together ideas, suggestions and concerns that we have shared over the past few months".² It acts as a general introduction to the first half of the staff questionnaire which discusses staff issues during the formulative stages of the evaluation project. Thus, this quote performs a dual function at the beginning of the questionnaire by introducing the general theme of the questionnaire and by introducing the first six questions.

In addition to this introductory quote from Doyle is a statement from this researcher which is designed to encourage staff to recall their feelings about the evaluation project in 1977. It says "As I think back to 1977, when the evaluation project was first introduced to staff, I remember feeling that:". Once again this statement encourages the staff to recall their experiences of the evaluation project as it was first introduced to the agency.

Question 1:

An evaluation of our agency would assist
us in improving our services to families.

This question was designed to measure staff commitment to the concept of evaluation. In responding to this question, seven of the fourteen staff strongly agreed with the statement. This indicates that these seven staff members felt that the evaluation project would help improve services and that

they were committed to this idea. Five staff agreed with the statement. Finally the remaining two staff were uncertain about this statement and responded as undecided. Overall 86 per cent (twelve staff) of the staff responses were positive and either strongly agreed or agreed with the statement indicating a commitment to the evaluation project as a means of improving services at the Children's Foundation.

Question 2:

The project represented an opportunity for me to be involved in defining agency goals and priorities..

This statement was designed to measure staff involvement in the evaluation project. Staff responded to this question in a number of ways. Two staff strongly agreed with the statement and six staff agreed with it. Consequently of the fourteen staff who responded to this question, eight believed that the evaluation project offered them an opportunity to be involved in the project for that reason. Four staff were undecided about how they felt about this statement. Two staff disagreed with it. When these responses are broken down into percentages, 57 per cent of the staff viewed the statement positively and saw the evaluation project as an opportunity for them to be involved in the definition of agency goals, 28.5 per cent were undecided if this statement represented their feelings and 14.5 per cent did not believe that this reflected their feelings about the evaluation project.

Question 3:

The project represented one more disruption to the smooth functioning of the agency.

This statement was designed to measure staff resistance to the idea of the evaluation of the agency program. Two staff strongly disagreed with this view of the evaluation project and ten staff disagreed with it. Two staff members were undecided if this statement represented their feelings about the evaluation project in 1977. As a result it is possible to conclude from these responses that staff did not agree with this negative view of the evaluation project. They did not see the evaluation project as a disruptive influence on the agency. The overall percentage of staff who shared this view is 86 per cent while the remaining 14 per cent of the staff were undecided about this statement.

Question 4:

The discussions about the project contributed to a more positive working environment at the agency.

This question was designed to measure the degree to which staff felt the discussions about the project were helpful. Staff responses to this particular question were scattered across the spectrum of possible responses. Two staff strongly agreed with the statement while five staff agreed with it. Three staff were undecided about whether this statement represented their feelings about the evaluation project in 1977. Finally, four staff disagreed with the statement. In the final analysis, 50 per cent of the staff agreed with this view of the impact of the discussions on the agency, and felt that these discussions contributed to creating a more positive working environment while 50 per cent of the staff were either undecided (21.4 per cent) or disagreed (28.6 per cent) with this view of the impact that the discussions had on the staff at the agency. This leaves this researcher with a number of questions about how staff viewed the effects of the discussion since the staff are equally divided on this particular statement.

Question 5:

The project would help us identify new alternatives for working with families.

This question addressed the staff perceptions for the need for the evaluation project. The entire fourteen staff responded positively to this statement with one staff member strongly agreeing with the statement and thirteen staff agreeing with it. As a consequence it is possible to conclude that staff felt that the evaluation project was a means of identifying new alternatives for working with families.

Question 6:

I was unable to understand the purpose of the project.

This question was designed to test staff resistance to the evaluation project. Since this question was negatively worded staff generally disagreed with the statement. Three staff strongly disagreed with the statement, nine staff disagreed and two staff were undecided about the statement. Consequently it is possible to conclude that 76 per cent of the staff felt that they understood the purpose of the evaluation project.

Statements 7 to 11 are preceded by a second quote from Doyle's first progress report which is designed to encourage staff to recall their concerns about the lack of information that the Children's Foundation had on families after discharge.

Question 7:

I believed that a follow-up study on our treatment program would assist us in planning for families.

This question again addressed the staff perceptions of the need for the evaluation project. Again, the fourteen staff responded positively to this statement with five staff strongly agreeing with the statement and nine staff agreeing with it. This compares favourably with Question 1 in which 86 per cent of the staff agreed with the statement indicating that the evaluation project would help improve services to families. It also agrees with the results of Question 5 in which 100 per cent of the staff viewed the evaluation project as a means of identifying new alternatives for working with families.

Question 8:

I was concerned about how families were
doing after discharge.

Of the possible fourteen respondents to this question, only thirteen staff were able to respond to this question. Of these respondents, all thirteen responded positively with seven staff strongly agreeing with the statement and six staff agreeing with it. Consequently staff agreed with the need for the agency to obtain more information on families after discharge. This statement, which was designed to measure staff perceptions of the need for the project, indicates from these responses that staff did agree that it was important to have more information available on families after discharge.

Question 9:

I wanted more information on families
after discharge.

This question also attempted to measure staff perceptions of the need for the evaluation project. Only twelve staff responded to this question indicating that two staff could not respond to the statement. Of those who

did respond, seven strongly agreed with the statement and five agreed with it. Consequently the responses to this statement are consistent with the responses to Question 8 and indicate staff perceived the need for the evaluation project as a means of answering their questions about how families were doing after discharge.

Questions 8 and 9, thus, attempt to determine staff perceptions of the need for the project and the degree to which they viewed the evaluation project as a means of providing information on families after discharge. Overall the staff responded positively to these two statements indicating a strong desire to obtain information on families after discharge. This lends support to the proposition that staff were committed to the evaluation project as a means of obtaining this type of information.

Question 10:

I was concerned about what would happen
to our program if families were shown to
be doing poorly after discharge.

This question attempted to measure staff resistance to the idea of the evaluation project and their fear of the impact that a negative evaluation might have on the agency. Only thirteen staff responded to this statement, however, their responses varied across the spectrum of possible responses. Four staff members expressed strong agreement with the statement while another four agreed with it. Two staff members were uncertain about the statement and three disagreed with it. Obviously the eight staff who agreed with the statement or strongly agreed with it were concerned about the impact that the evaluation project could have on the agency. This represents 62 per cent of the staff who were worried about the impact of the evaluation project on the agency. Significantly 23 per cent of the staff did not share their concern.

Question 11:

I was interested in participating in a project that would evaluate the success of my work with families.

This question was designed to measure staff commitment to the evaluation of their work. Of the twelve staff who were able to respond to this statement, two staff strongly agreed with it while ten staff agreed with the statement. Once again it appears that staff were committed to the concept of evaluating their own work in 1977. Thus, staff were committed to the implementation of the evaluation project and to its goal of evaluating their work.

Question 12 is preceded by a further excerpt from Doyle's progress report which suggests that the literature available in 1977 indicated that children and parents fail to maintain their new patterns of interaction and behaviour once the child is discharged from a treatment program.

Question 12:

I believed that the literature reports on treatment outcomes did not reflect the results of our program.

This question was designed to measure the level of commitment to the program at Children's Foundation and the level of staff support for the program as a successful one in providing treatment for families. In response to this question, only twelve staff responded to the question. These responses varied from agreeing to disagreeing with the statement. Five staff agreed with the statement indicating that they believed that the literature reports did not reflect the success of the Children's Foundation program. Four staff, on the other hand, were undecided about the statement while three staff disagreed with the statement. These three staff felt that the statement was wrong and that the reports from the literature did reflect the

results that the Children's Foundation was obtaining.

When the percentages are compared for those who agreed and disagreed with the statement, the differences in these two groups are significantly large. Five staff agreed with the statement representing 42 per cent of the staff who believed that the Children's Foundation was more effective than the reports in the literature. The three staff who disagreed with the statement represented 25 per cent of the staff responses. Finally, those staff who were undecided on this statement represented a further 33 per cent of the responses. As a result staff beliefs about how effective the program at Children's Foundation was varied significantly with the majority believing that the Foundation was effective in treating families and children.

Questions 13 and 14 follow a statement by this researcher stating that "In view of what the literature was saying about the lack of success of treatment programs,". This statement set the tone for these two questions in which staff were asked to express their feelings about the effectiveness of the Foundation's treatment program and staff willingness to be involved in an evaluation program which might demonstrate that the treatment program was ineffective.

Question 13:

I was pessimistic about the effectiveness of
our parent training program.

This question attempted to measure the resistance of staff and determine the degree to which staff felt that the program was ineffective especially in the light of the literature reports on treatment programs. Only twelve

staff responded to this statement. One member of staff agreed with the statement while three staff were undecided about the statement. Eight staff, however, disagreed with the statement. The responses to this statement indicate that staff felt that the Children's Foundation program in their views in 1977 was an effective treatment program and that they were not pessimistic about its effectiveness despite the reports in the literature. In general this represents positive support for the program since a majority of staff, 67 per cent, were not pessimistic about the program and its effectiveness in working with families.

Question 14:

I was interested in evaluating the agency's program.

This question made an attempt to measure staff commitment to the evaluation program. Staff were asked to respond to this statement to determine their commitment to a program of evaluation which might confirm the negative findings being cited in the literature. Three staff strongly agreed with the statement while nine staff agreed. The final member of the thirteen respondents was undecided about this statement. As a result, the general response to this question provides further evidence of staff willingness in 1977 to support the evaluation project. A total of 92 per cent of staff responses to this question fell in the strongly agree and agree categories.

In preparation for questions 15 to 18, this researcher presented the staff with a further statement from the progress report which addressed the question of the nature of the discussions that the agency staff had about the evaluation project. This quote preceded these four questions which

were designed to see how staff felt about the discussions at the agency. All four questions are related to the concept of discussion.

Question 15:

I was concerned about the amount of time that the discussions about the project took away from our work.

This question was designed to evaluate how staff felt about the discussions that occurred at the agency. All fourteen staff responded to this question with the majority of the staff disagreeing with the statement. Three staff strongly disagreed with the statement while a further six staff disagreed with it. Three staff were undecided about the statement and two staff agreed with it. Overall 63 per cent of the possible responses to this question disagreed with it, indicating that the discussions were viewed positively. Staff were not concerned about the amount of time the discussions took away from work.

Question 16:

Perhaps the most valuable part of the project was the staff discussion that occurred.

Once again, this question was designed to measure the degree to which staff valued the discussions that occurred at the agency. Although the majority of the staff felt that the discussions were valuable, the answers from the fourteen staff responding to this question covered the entire spectrum of possible responses. One staff member strongly agreed with the statement, while a further eight agreed that the staff discussions were valuable. Two staff members were undecided about the statement, while a further two disagreed with it. Finally, one staff member strongly disagreed with the statement. A comparison between those who responded positively and those

who responded negatively to the statement indicates that 64 per cent of the staff either strongly agreed or agreed with the statement, while 21 per cent of the staff either strongly disagreed or disagreed with the statement.

Interestingly enough when this question is compared with Question 4 similar trends seem to emerge. Question 4 asked staff whether or not the discussions at the agency contributed to a positive working environment. In responding to this question, 50 per cent of the staff either strongly agreed or agreed with the statement, while 29 per cent disagreed. As a result, the consistency between these two questions suggests that staff views about the value of discussions at the agency and the degree to which discussions contributed to a positive working environment demonstrate reliable trends in staff opinions about these discussions. It appears that staff believed that the discussions about the evaluation project were useful while a majority of staff felt that these discussions also contributed to making the working environment more positive at Children's Foundation. In addition, these discussions apparently were viewed as a valuable part of the evaluation project itself.

Question 17:

I was frustrated with the discussions about the project.

This question attempted to measure staff frustrations with the discussions about the evaluation project. Once again, it was designed to measure the degree to which staff felt the discussions about the project were valuable. Nine staff disagreed with the statement and one staff member strongly disagreed with the statement. Three staff were undecided about this particular statement. As a result of the fourteen staff who responded to this particular question, 71 per cent of the staff disagreed with the statement and indicated

that the discussions about the project were not frustrating in their experience. An additional 28 per cent of the staff were undecided on this particular question.

Question 18:

I was hesitant about expressing many of my negative reactions to the project.

This final question was designed to measure the degree to which staff felt the the discussions were open and a safe place in which to present their arguments for and against the evaluation project. This question attempted to explore the degree to which staff felt comfortable in expressing their negative reactions to the evaluation project. Three staff agreed that they had hesitations about expressing their concerns about the evaluation project, while one of the fourteen respondents to this question was undecided about it. Eight staff responded that they were not hesitant in expressing their concerns about the project by disagreeing with the statement and a further two staff strongly disagreed with the statement.

As a result a majority of the staff felt that they could express their negative reactions to the project. These responses indicate that 71 per cent of the staff felt that the discussions were open and that they were able to express their concerns about the evaluation project. The remaining 29 per cent were undecided about how to respond to this question.

Questions 19 to 25 were preceded by a further statement from this researcher which stated that "As a result of the discussions about agency goals and priorities, I felt that:". This introduction was designed to review a number of issues with staff relating to the re-definition of agency goals

and priorities, and the overall need for an evaluation project.

Question 19:

The project encouraged us to re-examine
some of the agency goals.

This question addressed the concept of need and the staff's perception of the need for the evaluation project. Three staff strongly agreed with the statement and a further ten staff agreed with it. Only one staff member was undecided about the statement. As a result, 93 per cent of the staff responses supported this statement and believed that the evaluation project encouraged staff to re-examine agency goals.

Question 20:

An evaluation of the agency should be
initiated.

This question was designed to measure the commitment of the staff to the evaluation project. All fourteen staff responded to this statement positively. Three staff responded by strongly agreeing with the statement and the remaining eleven staff agreed with it. As a result, this question demonstrates a clear commitment from staff to the evaluation project with 100 per cent of the staff responding positively to this question.

Question 21:

The project would provide direction for
treating families.

This question addressed the concept of need and staff perceptions of the need for the evaluation project. Again, the responses to this question were essentially positive with two staff strongly agreeing with the statement

and eleven staff agreeing with it. Only one staff member was undecided about this statement. Consequently, the responses to this question indicate that 93 per cent of the staff believed that the project would provide direction for treating families.

Question 22:

I was able to resolve the uncertainties that
I had about the project.

This question addressed the concept of discussion and attempted to measure the degree to which staff were able to resolve concerns they had about the project. Of the twelve staff who responded to this question, one individual strongly agreed with the statement, five individuals agreed with it and three staff were undecided. Finally, three staff disagreed with the statement. These responses indicate that 50 per cent of the staff felt they were able to resolve the uncertainties that they had about the project, while 25 per cent were undecided and a further 25 per cent felt that they were unable to resolve these uncertainties.

Question 23:

The agency needed to help staff re-define
the goals of treatment.

This question also addressed the concept of need and the need for the project in re-defining the goals of treatment. All fourteen staff responded to this question with a majority of staff supporting it. Two staff strongly agreed with the statement while a further eight staff agreed with it, indicating a strong need for the agency to help staff re-define the goals of treatment. Two staff were undecided about this statement, while two others disagreed with it. Overall 72 per cent of the staff responded positively to this statement and agreed that the agency needed to help staff re-define the

goals of treatment. This left 14 per cent of staff who were undecided about this statement and a further 14 per cent who disagreed with it.

Question 24:

The project was needed to help re-establish the goals of the agency.

This question was designed to measure staff commitment to the project and the role that it could play in helping re-establish agency goals. This question is almost a repeat of the previous question with the major difference being that Question 23 refers to the goals of treatment and this question refers to the goals of the agency. Again, all fourteen staff were able to respond to this question with only minor variations from the answers provided to the previous question. One staff member strongly agreed with the project while a further nine agreed that it was necessary to help re-define agency goals. One staff member was undecided and three staff members disagreed with the statement. Again, 72 per cent of the staff responded positively to this question, while 7 per cent were uncertain about it and 21 per cent disagreed that the project was necessary to help re-establish agency goals.

When the answers to these two questions are compared, it is interesting to see that the percentages of staff responding positively to these two questions are essentially the same with only slight variations in the distribution of the answers between the categories strongly agreeing and agreeing. On the reverse side of the coin, only one additional staff member disagreed with the statement. As a result, there seemed to be a general consensus of the staff in 1977 that both the goals of the agency and the goals of treatment had to be re-defined. The only difference that exists is in the wording of

these two statements. Question 23 refers to the agency responsibility for helping staff re-define the goals of treatment while Question 24 addresses the project as a means of re-establishing agency goals.

Question 25:

The implementation of the project encouraged me to question agency goals.

This statement was designed to measure the staff perceptions of the need for the evaluation project. Here, all fourteen staff were able to respond to the statement. Eight staff agreed with the statement while four staff disagreed. The remaining two staff were undecided about the statement. The split between those who felt that the implementation of the project encouraged them to question agency goals and those who did not feel that this occurred is 8 to 4, or 57 to 28 per cent respectively. Thus, while the majority of staff seem to agree that the evaluation project encouraged them to question agency goals, an equally large percentage of staff did not believe this to be the case.

Questions 26 to 30 are prefaced with the statement "I can remember numerous staff meetings during which:". This statement was designed to encourage staff to recall any of the discussions at the agency that dealt with the pertinent issues relating to the evaluation project. In addition the preface statement encouraged staff to recall the nature of the discussions that occurred at the agency in 1977.

Question 26:

All the concerns and benefits of the project were discussed.

This question was designed to measure the concept of discussion and the degree to which staff believed that the concerns they had about the project and the benefits it might provide the agency were discussed. The thirteen staff who responded to this statement divided almost evenly between agreeing with the statement and disagreeing with it. Seven staff agreed with the statement while five staff disagreed. Only one staff member was undecided about this particular statement. The percentages for each response were 54 per cent in agreement to 38 per cent in disagreement. As a result, the question of whether or not all the benefits and concerns that staff had about the project were resolved during the discussion periods remains unresolved. For a number of staff the discussions did resolve all the concerns and discuss all the benefits of the project. For an almost equal number of staff the discussions did not address all the issues.

Question 27:

I was able to contribute towards the implementation of the project.

This particular question was designed to measure the degree to which staff felt involved in the project. The responses to this question span the whole spectrum of possible responses, however, the majority of staff felt that they were able to contribute towards the development of the evaluation project. Three staff strongly agreed with the statement, seven staff agreed with it while two staff were undecided. On the negative side, one staff member disagreed with the statement and one staff member strongly disagreed with the statement. Overall the response was positive with 71 per cent of the staff either agreeing or strongly agreeing with the statement. Only 14 per cent of the staff disagreed with this particular statement. In addition, 13 per cent of the staff were undecided about the question.

Question 28:

I expressed my concerns about the project
without fear of reprisal for what I might say.

This particular question was designed to measure the degree to which staff felt the discussions were open and they were able to express their concerns about the project. Generally, staff responded positively to this question with two and nine staff strongly agreeing and agreeing with this statement respectively. One staff member was undecided on the statement while two staff members disagreed with it for a total of fourteen staff who responded to this question. As a result, 79 per cent of the staff responding to this question responded positively compared to 7 per cent who were unable to respond to it and 14 per cent who responded negatively. The overall conclusion from this particular question is that staff seemed to feel comfortable in expressing their concerns about the project without fearing reprisals for their statements.

Question 29:

I was encouraged to participate in the
development of the project.

This particular statement was designed to measure the concept of involvement and the degree to which staff felt they were encouraged to become involved in the project. Generally, the fourteen staff who responded to this question responded positively indicating that they felt they were encouraged to participate in the development of the project. Two and seven staff responded to this question by strongly agreeing and agreeing with it respectively. Three staff were undecided about the statement, while two staff disagreed. The percentage breakdown demonstrates that 64 per cent of the staff either agreed or strongly agreed with the statement, while 22 per cent were

undecided and only 14 per cent disagreed with the statement.

Question 30:

I was never hesitant in expressing my opinion about the project.

This question was designed to measure the degree to which staff felt comfortable in expressing their opinions about the project. Again, staff responded positively to this particular question with two and nine staff strongly agreeing and agreeing with the statement respectively. Two staff were undecided while one staff member disagreed with the statement. This represents 84 per cent of the staff who felt that they were able to indicate any reservations or opinions they had about the project.

When this particular question is compared to Question 18, which also addresses the question of hesitation about expressing concerns about the project, the results are basically the same. For Question 18, ten staff either disagreed or strongly disagreed with the statement presented. Since this statement was negatively worded, saying that staff were hesitant to express their concerns, the strong trend to disagree with this statement indicates that staff did not feel they were hesitant about expressing their concerns. Consequently, the results for Question 18 compare favourably with those from Question 30 in which the staff again expressed their belief that they were not hesitant in expressing their concerns or opinions about the evaluation project.

Questions 31 to 36 are preceded with another statement from the evaluator's report. The initial statement indicates that there was a gradual trend in residential treatment facilities towards a six month treatment period.

This introductory statement suggests that as a result staff felt it was important to re-assess and re-define the goals of the agency.

In addition to the statement from the evaluator, this researcher presented staff with a further qualifying statement which introduced the series of questions below. This researcher presented this following statement:

"As I think back over the many changes that occurred in the agency in 1976 and 1977, I remember feeling that:". This statement was designed to encourage staff to recall a number of the changes that occurred in the agency during the time period that the evaluation project was being developed.

In addition, it was hoped that staff could recall some of the major philosophic changes that had occurred in the agency during the years immediately prior to the introduction of program evaluation in the agency and during the time that program evaluation was being discussed. In fact, seven of the fourteen staff have worked with the agency in excess of six years, with four staff having worked longer than ten years. Consequently, these staff would be aware of other changes that had occurred in the agency over the years.

All the questions in this section with the exception of Question 35 were more negatively worded and in computing the group scores for the bivariate analysis discussed later, these questions had to be reverse coded for the statistical analysis. As a result, this researcher expected that many of the staff would disagree with these negative statements as a routine response.

Question 31:

The agency had lost sight of its goals and priorities.

This particular question was designed to measure the need that staff perceived for the evaluation project. As expected the majority of staff disagreed with this statement. Nine of the total fourteen respondents disagreed with the statement. Four staff were undecided whether or not the agency had lost sight of its goals in 1977 (according to their feelings). One staff member agreed with the statement. Consequently, in interpreting this question the majority of staff did not feel that the agency had lost sight of its goals. In fact, 64 per cent of the staff disagreed with this statement. 29 per cent, however, were undecided about this particular question leaving only 7 per cent of the staff responses in agreement with this statement.

Question 32:

Changes had occurred in the past without staff involvement.

This question addressed the concept of involvement and the degree to which staff believed that changes that had occurred in the agency in the past were made without the involvement of staff. The responses to this question divided equally among those who agreed and disagreed with the statement. One staff member strongly agreed with the statement while five staff members agreed with it, indicating that they felt the staff had not been involved in changes in the past. On the reverse side of this question, five staff disagreed with the statement and one staff member strongly disagreed with the statement. The final two staff members who responded to this particular question were undecided about the statement. Thus, the split between those agreeing with it and disagreeing with it is exactly equal. 43 per cent of the staff responses agreed with the statement and 43 per cent of the staff disagreed. This left 14 per cent of the staff who were undecided

on this particular question.

Question 33:

The project would collect evidence to demonstrate that some of the recent changes in the agency were detrimental to the program.

This statement was designed to measure the resistance of the staff to the evaluation project. If staff responded positively to this particular question, it would indicate that they were viewing the evaluation project as a means of returning to the status quo of a few years or even a few months previous to the introduction of the evaluation project. Of the fourteen respondents to this question, eight staff disagreed with the statement while a further five staff were undecided about it. Only one staff member agreed with the statement indicating that they felt that the project would demonstrate that the past agency practices were best. This indicates that a majority of the staff felt that the evaluation project was not designed as a means of demonstrating that the old ways were the best. 57 per cent of the staff disagreed with this statement, representing a majority of staff who felt that the project would not be used to demonstrate the errors of past decisions. However, a significant number of staff representing 36 per cent of the responses were undecided about this particular question. Consequently, if these responses indicate their views in 1977 as this researcher believes they do, it indicates that a number of staff were uncertain as to whether or not this evaluation project would demonstrate that some changes had been detrimental to the program. This percentage represents a large majority of staff who were undecided on the question of the role that the evaluation project would play in documenting previous decision errors.

Question 34:

Changes in agency policy had occurred in
a haphazard way.

This question was designed to measure the need for the evaluation project. If staff agreed with this it would indicate a need for a more effective way of planning changes in agency policy. Again, if staff felt that the evaluation project would document problems with recent changes, this researcher felt that staff would also see these changes as having occurred in a haphazard way.

Of the fourteen respondents to this question the majority either strongly disagreed or disagreed with the statement, one and nine staff members respectively. This left three staff members who were uncertain about the statement and one staff member who agreed with the statement. This represents 71 per cent of the staff who disagreed with the statement that changes had occurred in a haphazard way. Only 22 per cent of the staff were undecided on this question and only 7 per cent agreed with the statement. As a result the majority of staff did not believe that previous changes had occurred in a haphazard way.

When the results to this particular question are compared with those to the previous question, it demonstrates consistency among staff responses. In this particular question 71 per cent of the staff did not feel that changes had occurred haphazardly. In the previous question, 57 per cent of staff did not believe that the evaluation project would demonstrate that recent changes had been detrimental to the agency program. As a result, these two percentages demonstrate that generally staff did not believe that changes had occurred haphazardly and that the changes occurring most recently

had been detrimental to the program. The overall response to these questions demonstrates that staff believed decisions were being made in an appropriate fashion.

Question 35:

The project would demonstrate the effectiveness of our program.

This positively worded question was designed to measure the concept of need and the degree to which staff felt that the evaluation project would fulfil a need by demonstrating the effectiveness of the program. As expected a majority of staff responded positively to this question with one staff member strongly agreeing and twelve staff members agreeing with it. Only one staff member was undecided on this particular question. As a result 93 per cent of the staff either strongly agreed or agreed with this statement and responded positively. Staff, as a result, viewed the evaluation project as a means of demonstrating the effectiveness of their program.

Question 36:

I would be unable to influence the development of the project.

This particular question was designed to measure the degree to which staff believed they were involved in the evaluation project and would be able to influence the direction of its development. Again, this particular statement was negatively worded and as expected a significant number of staff disagreed with the statement. However, the staff responses on this question were split almost evenly between those agreeing with it and those disagreeing with it. Of the fourteen respondents to this question, six staff responded negatively indicating that they did believe they were able to influence the evaluation project as it developed. One staff member

responded by strongly disagreeing with the statement, while six staff members disagreed with it. Two staff members were undecided about this statement and five staff members agreed with the statement. As a result, 50 per cent of the staff exactly disagreed with the statement and as a result reflected their belief that they were able to influence the development of the project. On the other hand, 36 per cent of the staff indicated that they did not believe that they were able to influence the development of the project. This left only 14 per cent of the staff who were undecided about this particular question.

It is interesting to compare the responses to this question with those responses to Question 32, in which staff were asked about changes occurring without staff involvement. Again, the responses are split almost evenly between those who felt that they were able to influence the development of the project and those who felt they were not able to influence the development. In Question 32, 43 per cent of the staff responded negatively to the question indicating that they felt staff had been involved in previous agency changes. When this is compared to this particular question it demonstrates that 50 per cent as compared to 42 per cent of the staff felt that they were able to influence the project versus the 42 per cent who felt that the changes had occurred involving staff input. On the negative side of these questions, 43 per cent of those responding to Question 32 indicated that the staff were not involved in previous agency changes as compared with 36 per cent of the staff responding to Question 36 who felt that they were unable to influence the development of the evaluation project. As a result, these questions tend to suggest an exact split between staff who believed that changes occurred without staff input and that

staff were unable to influence the development of the program and those staff who believed that they had been involved in agency change and would be able to influence the development of the evaluation project.

Questions 37 to 40 are prefaced with a statement from the evaluator and from this researcher which were both designed to encourage staff to recall the discussions about who should do the evaluative study of the agency. The quotation from the agency's evaluator suggests one process possible in conducting an evaluation would be to hire an outside evaluator to complete a report. The statement from this researcher on the other hand builds on the discussions about who should do the evaluation and encourages staff to think back to those discussions and their feelings about the question of who should evaluate the agency. The introductory statement from this researcher suggests that "As we discussed who should do the evaluation of our agency, I can remember thinking that:". This prefacing statement encourages staff to think back to their feelings about the selection of the evaluator.

Question 37:

I had very ambivalent feelings about participating in the project.

This particular question was designed to measure staff resistance to participation in the evaluation project. Of the eleven staff who were able to respond to this statement, one staff member strongly disagreed with the statement while four staff members disagreed with it. Three staff were undecided about the statement while three staff agreed with the statement. Consequently, the totals represent 46 per cent of the staff responses as either disagreeing or strongly disagreeing with the statement as compared

with 27 per cent of the staff who were undecided about the evaluation project and 27 per cent of the staff who did have ambivalent feelings about participating in the project. When the staff who responded negatively to this statement are compared with those who responded positively, i.e. who had ambivalent feelings about participating in the evaluation project, the percentages are 46 per cent of staff who did not have ambivalent feelings about the project compared to 27 per cent of staff who did have ambivalent feelings. As a result while the majority of staff appear to have had no ambivalence about participating in this project, an equally large number of staff were ambivalent about participation.

Question 38:

I did not believe an outside evaluator would be as open to staff participation as an in-house person would be.

This particular question was designed to measure staff involvement in the evaluation project. Of the thirteen staff who responded to this question, one staff member strongly agreed with the statement while six staff members disagreed with it. Three staff were undecided about the statement while three staff agreed with it. Consequently, it appears that the staff at Children's Foundation did not see the use of an external evaluator as inhibiting their ability to participate in the evaluation project. The majority of staff, 54 per cent, felt that this statement did not reflect reality and that they believed an outside evaluator might be as open to staff participation as an internal evaluator. On the other hand, 23 per cent of the staff were undecided and a further 23 per cent agreed with the statement. As a result, the comparison between those staff who believed that an outside evaluator would inhibit their ability to participate as compared with those who did not believe this would be the case is a

comparison between the percentages of 23 per cent to 54 per cent who believed that an outside evaluator would be as open to staff participation.

Question 39:

It was important to involve all the staff
in designing the project.

Once again this statement was designed to measure the degree to which staff felt they should be and were involved in the evaluation project. The question asks staff to respond to the concept that staff involvement in designing the project was important. The majority of staff agreed with this statement with six staff strongly agreeing and four staff agreeing with it. The three remaining respondents to this question involve two staff who were undecided and one staff member who strongly disagreed with this statement. Overall the respondents who either agreed or strongly agreed with the statement represented 77 per cent of all staff responses. 15 per cent were undecided and 7 per cent disagreed with the statement, believing that not all staff should be involved in the design of the project.

Question 40:

We should use an internal evaluator for
our project.

This question was meant to measure staff feelings about whether to use an internal or external evaluator and thereby also address the concept of involvement of the staff in the evaluation project. Interestingly enough staff responses on this question are split evenly, with one staff member each strongly agreeing and strongly disagreeing with the statement and four staff members each agreeing or disagreeing with the statement. Only three of the thirteen staff who responded to this question were undecided about

the question. As a result, 38.5 per cent of the staff responded positively to this question, and 38.5 per cent responded negatively. This represents an even split between the staff who believed that an internal evaluator should be used and those who believed that an internal evaluator should not be used.

This suggests in conjunction with the responses to Question 38 that staff feelings about the use of an internal or external evaluator were evenly split with no strong reservations on either side of this question. Since staff split evenly on this question about whether an internal evaluator should be used and on Question 38 about the openness of an in-house or external evaluator to staff participation, it is possible to conclude that staff had no strong feelings about either method of conducting the evaluation project.

Questions 41 to 45 were prefaced with the statement "Once we reached the decision to use an in-house evaluator and he started to work on the project, I remember that:". This statement encouraged staff to think back to the initial phases of the evaluation project when Doyle Clifton first began to design it. The statement was designed to encourage staff to recall their feelings at the time and determine the degree to which they wanted to participate in the evaluation project.

Question 41:

The idea of evaluating my work encouraged me
to become more involved in the project.

This question was designed to measure staff commitment to the evaluation project. Twelve staff responded to this question with the majority of staff,

seven in all, agreeing with the statement. Three staff were undecided about the statement while two staff disagreed with it. It appears that the idea of evaluating one's own work encouraged 58 per cent of the staff to become more involved in the evaluation project. Only 17 per cent of the staff did not believe that this was the case and 25 per cent of the staff were undecided on this particular question.

Question 42:

Doyle was able to resolve many of my concerns regarding the project.

Aside from measuring the degree to which staff felt comfortable with Doyle's responses to their concerns and issues, this question also contributes to the sense of commitment of the staff to the evaluation project. All fourteen staff responded to this question with two staff strongly agreeing with it and seven staff agreeing with it. Four staff were undecided about the question while only one staff member disagreed with the statement. Consequently, 64 per cent of the staff felt that the evaluator did resolve their concerns about the evaluation project. 29 per cent of the staff were undecided while 7 per cent of the staff felt that the evaluator did not resolve many of their concerns about the project.

Question 43:

Even Doyle had difficulty addressing all our concerns.

This question attempts to measure staff involvement in the project and the degree to which Doyle was able to address the concerns that staff had about the evaluation project. Of the fourteen respondents to this statement, eight agreed with the statement indicating they felt that Doyle did have some difficulty in responding to and resolving their concerns about the

project. Three staff were undecided about this statement while three staff disagreed, indicating that they felt that Doyle did not have any difficulty in addressing their concerns about the project. The percentage breakdown of staff responses indicates that 57 per cent of the staff believed that Doyle did have difficulty in addressing all their concerns. On the other hand, 21.5 per cent of the staff were undecided on the statement and a further 21.5 per cent disagreed with it. As a result, it appears that staff did believe that Doyle had some difficulty in addressing all their concerns about the evaluation project.

Question 44:

No matter how many times I talked with Doyle, I still believed there were unstated motives for the project.

This particular question was designed to measure staff resistance to the evaluation project and their suspicions about unstated motives for the project. Fourteen staff responded to this question with two staff strongly disagreeing with it and two staff agreeing with it. The majority of the staff, however, were undecided about this statement with ten staff falling into that category. The percentage breakdowns indicate that 14 per cent of the staff respectively agreed or disagreed with this particular statement leaving a total of 72 per cent of the staff who were uncertain about this question. As a result staff were undecided about whether or not there were unstated motives for the evaluation project.

Question 45:

Doyle was willing to listen to my concerns about the project.

This particular question was designed to measure the degree of staff involvement in the evaluation project and their feelings about their ability

to discuss their concerns with the evaluator. All fourteen staff responded positively to this question, with five staff strongly agreeing with it and nine staff agreeing with it. As a result, the staff obviously felt that Doyle was open to discussions about the evaluation project and open to reviewing staff concerns about it, since 100 per cent of the staff responded positively to this question.

Questions 46 and 47 were prefaced with a quote from Doyle's progress report which was designed to raise the question of improving services at the agency. While this quote admits that not all units had the opportunity to discuss this question, Doyle mentions that it is worth discussing the question in his progress report. This quote sets the stage for the two questions which deal with the concept of improving services at the agency and staff willingness to participate in the evaluation project..

Question 46:

I cannot remember discussing the need to improve services at the agency.

This particular question was designed to measure the concept of discussion and the degree to which staff were able to remember whether this particularly important issue was discussed at the agency. Of the fourteen staff who responded to this statement two staff strongly disagreed with it and eleven staff disagreed with it, indicating that a majority of staff seem to believe and remember that they discussed improvement of services at the Children's Foundation. Only one staff member was undecided about this particular question. As a result, a total of 93 per cent of the staff either disagreed or strongly disagreed with this statement indicating that they do remember discussing the need to improve services at the agency. Only 7 per

cent of the staff were unable to remember discussing the need to improve services at the agency.

Question 47:

I participated reluctantly in the project.

Once again, this particular question was designed to measure staff resistance to the project and participation in the project. Of the fourteen respondents to this statement, two staff strongly disagreed with it while nine staff disagreed. Two staff were undecided about the statement while only one staff member of the fourteen respondents agreed with the statement. As a result, a total of 79 per cent of staff responses indicate that they indeed participated in the project without reluctance since they disagreed with this particular statement. 14 per cent of the staff were undecided about this particular statement and only 7 per cent of the staff agreed with the statement.

Questions 48 to 52 were prefaced with the statement "When the question of improving services was raised, I thought that:". This statement set the stage for the following five questions, which address issues around accountability, motives and the general improvement in agency services.

Question 48:

Every unit should have had the opportunity to discuss whether or not services needed to be improved.

This question was designed to measure the degree to which staff believed discussions occurred and to contribute towards an understanding of the concept of discussion as formulated by this researcher. Staff responses to

this particular question once again covered the whole spectrum of possible responses, but the majority of responses were positive. Three staff strongly agreed with the statement while seven staff agreed with it. Of the remaining fourteen respondents, one staff member was uncertain about the statement and two staff members disagreed with it. The final member of staff strongly disagreed with this particular statement. The percentage breakdown indicates that 72 per cent of the staff responded positively to this question indicating that they believed every unit should have had the opportunity to discuss whether or not services needed to be improved. 7 per cent of the staff were undecided and 21 per cent of the staff disagreed with this statement indicating that they did not believe that every unit should have had the opportunity to discuss whether or not services needed to be improved. Consequently, the feelings at the agency about discussing whether or not services needed to be improved, and whether each unit should have had the opportunity to discuss these improvements, varied significantly. Although the majority of responses were positive indicating that each unit should have had the opportunity to discuss improving services, some staff members felt that this was not necessary.

Question 49:

The project was an attempt to document agency problems.

This particular question was designed to measure staff resistance to the project and the tendency to adopt a negative view of the project as a means of documenting problems. Again, on this statement the fourteen respondents were evenly divided. One staff member strongly disagreed with the statement and six staff members disagreed with it, representing 50 per cent of the staff responses who felt that the project was not an attempt

to document agency problems. Three staff were undecided about this statement and four staff agreed with it. When the comparison is made between those who agreed and those who disagreed with the statement the percentages involved are 28 per cent disagreeing with the statement compared to 50 per cent agreeing with the statement, indicating a significant division among staff on the question of the purpose of the evaluation project. 50 per cent of the staff did not believe that this project was designed to document agency problems, while 28 per cent believed that the project was an attempt to document agency problems. 22 per cent of the staff were undecided on this question. As a result, some of the staff at the agency must have felt in 1977 that the evaluation project was indeed an attempt to document agency problems, and that this was one of the motivating factors behind the initiation of the evaluation project.

Question 50:

The discussions were most heated when
we talked about improving services.

Once again, this question was designed to measure the concept of discussion and the degree to which staff believed the discussions were heated around the issue of improving services. Of the fourteen respondents to this question, the majority disagreed with the statement. One staff member strongly disagreed with the statement, while nine staff members disagreed with it. One staff member was undecided and three staff members agreed, indicating their perception that the discussions about improving services were heated. Nevertheless, 71 per cent of all staff responses still did not agree with this statement compared with 7 per cent who were undecided and 22 per cent of staff who agreed with the statement.

Question 51:

Our agency should be accountable for
the services we provide families.

This particular question was designed to measure the commitment of staff to the evaluation project. Of the fourteen respondents to this question all respondents responded positively with six members of staff strongly agreeing with the statement and eight staff members agreeing with it. Consequently 100 per cent of staff responses indicate that staff believed the agency should be accountable for the services it provides families.

Question 52:

The project might reveal that I was
failing with families.

This particular statement was designed to measure the resistance of staff to the evaluation project for fear that the evaluation project would reveal the failure of staff members to deal adequately with families. Of the thirteen respondents to this question the majority disagreed with the statement. Two staff members strongly disagreed with the statement while eight staff disagreed. Two staff members were undecided on the statement and one staff member agreed with it. Consequently the majority of staff did not feel that the evaluation project would reveal that they were failing with families and consequently did not feel threatened by it. The percentage breakdown on this particular question indicates that 77 per cent of the staff disagreed or strongly disagreed with this statement and as a result revealed their belief that the project would not indicate that they were failing with families. 15 per cent of the staff were undecided on this question and only 8 per cent of the staff agreed with it.

Questions 53 to 58 are prefaced with the statement "As I think back I

remember that:". This statement was really designed to assist staff in recalling their feelings about a number of subjects. It also helped to re-focus staff responses to their feelings in 1977.

Question 53:

The idea of having my work evaluated was quite threatening.

This particular question was designed to measure staff resistance to the evaluation project and their feelings about being threatened by the concept of evaluating their work. Of the twelve respondents to this question, one staff member strongly disagreed with the statement and eight staff disagreed with it. Two staff were undecided about the statement and one staff member agreed with it. As a result, 75 per cent of the staff responses indicate that the staff were not threatened by the evaluation project and the idea of having their work evaluated. 17 per cent of the staff were undecided on this question and 8 per cent of the staff agreed with it.

Significantly, this question immediately follows a preceding question which was also designed to test staff fears about the outcomes of the evaluation project. Both Questions 53 and 52 maintained similar response rates reinforcing the conclusion that staff did not feel threatened by the evaluation project and were confident that the work they do at the Foundation was valuable. In Question 52, 77 per cent of the staff did not believe that the evaluation project would reveal that they were failing with families. In Question 53, 75 per cent of the staff did not feel threatened by the idea of having their work evaluated.

Question 54:

I had many informal discussions with my co-workers about the project.

This particular question was designed to measure the concept of discussion and the degree to which staff discussed the evaluation project informally with other staff members. Significantly the division between staff on this question was equal, with seven staff agreeing with the statement and five staff disagreeing with the statement. Two further staff members strongly disagreed with the statement. As a result it appears that half of the staff did have informal discussions about the project and half did not. The percentages are divided equally with 50 per cent of the staff indicating that they had many informal discussions with their co-workers and 50 per cent of the staff indicating that they did not have informal discussions.

Question 55:

I was concerned about the impact that the project would have on my job.

This question was designed to measure staff resistance to the evaluation project and once again assess the degree to which staff were concerned about the impact that the project would have on their jobs. Of the thirteen respondents to this question, one staff member strongly disagreed with the statement and seven staff members disagreed with it. One staff member was undecided about the statement and four staff members were concerned about the impact of the evaluation project on their jobs and agreed with the statement. As a result, 62 per cent of the staff were not concerned about the impact that the evaluation project would have on their jobs, while 31 per cent of the staff were concerned. This left 7 per cent

of the staff who were undecided about this particular statement. As a result it is possible to conclude that some staff were concerned about the issue of impact that the evaluation project would have on their jobs.

Question 56:

I was interested in being involved in the project.

This particular question was designed to measure staff involvement in the evaluation project. Generally staff responded positively to this statement with two staff strongly agreeing with it and eight staff agreeing with it. Only three of the thirteen respondents were uncertain about how they felt about participating in the evaluation project. As a result a total of 77 per cent of the staff responded positively to this question indicating that they were interested in being involved in the project while only 23 per cent of the staff were undecided about this statement.

Question 57:

Despite the numerous meetings about the project, I still felt unclear about the purpose of the project.

This question was designed to measure the degree to which staff felt involved in the evaluation project. The fourteen staff who responded to this question generally disagreed with it, indicating that they were clear about the purpose of the project. One staff member strongly disagreed with the statement and eleven disagreed with it. One staff member was uncertain about the statement and one staff member agreed with it. As a result 86 per cent of the responses to this question either disagreed or strongly disagreed with the statement and indicated that staff felt that they were clear about the project and its purposes. The remaining 14 per cent of

staff responses were divided equally between the two staff members, one of whom responded by agreeing with the statement and the second staff member who was undecided about it.

When this question is compared with the results from Question 6, which also asked about the staff's understanding of the project, the results are similar with 85 per cent of the staff responding to that question by disagreeing with it. Consequently it is possible to conclude that the staff did have a clear understanding of the purposes of the project at the agency. In both questions, 85 per cent of the staff responded by indicating that they disagreed with the statements in Questions 6 and 57. In both these questions the staff responded by disagreeing with the statements indicating that in fact they did have a clear understanding of the purpose of the project.

Question 58:

I decided to wait and see how the project would develop.

This particular quote was designed to measure the degree staff were actively involved in the project. In responding to this question staff would reveal whether or not they were involved in the project or were prepared to stand on the sidelines to see how it developed before committing themselves to the project. In the thirteen responses to this question, the majority of the staff agreed with the statement with one staff member strongly agreeing with it and nine staff members agreeing with it. On the other extreme, three staff disagreed with this statement. As a result, 76 per cent of the responses from staff either strongly agreed or agreed with this particular statement, indicating that they decided to wait and see how the project would develop. On the other extreme, 23 per cent of the staff

responded negatively to this particular question.

While this particular question was designed to measure staff involvement in the project by seeing how many staff would "wait and see" about the project, the responses seem to indicate a lack of resistance to the project since the majority of the staff were prepared to wait for the evaluation project to develop.

At this point in the questionnaire, this researcher introduced a second report of Doyle Clifton's to change the focus of the questionnaire and the focus of staff responses. Initially, in reviewing the evaluator's reports, this researcher noticed a change in the tone of the reports to indicate that the evaluator after working with the project for about one year was better able to name staff concerns about the project. As a result this researcher was interested in attempting to determine if substantial changes in staff attitudes occurred after this period of time. This researcher thought that after a period of time staff might reflect a more positive attitude towards the evaluation project if they felt that they were involved and had an opportunity to express their concerns about the project.

Questions 59 and 60 were prefaced with an excerpt from this second progress report discussing the need for feedback as a means for implementing more rational change in the agency. The preceding quote from the evaluator's 1978 progress report suggests the importance of feedback for more rational decision making and better case planning.

Question 59:

I was interested in obtaining feedback on my work through the project.

This question was designed to measure staff commitment to the evaluation project and interest in obtaining feedback on their work. Staff responses to this particular question were generally positive, with a majority of the thirteen staff responding by either agreeing or strongly agreeing with the question. Ten staff agreed with this particular statement while two staff strongly agreed with it. Only one staff member was undecided about the statement, representing the total of thirteen responses. As a result, 93 per cent of the staff who responded to this question were interested in receiving feedback on their work, while only 7 per cent of the staff responses were undecided about this particular question.

Question 60:

I appreciated having feedback from the evaluator on the progress we had made with the project.

This particular question was designed to measure the concept of discussion and the degree to which staff appreciated having feedback from the evaluator. Again, thirteen staff responded to this question and responded positively. Three staff strongly agreed with the statement while nine staff agreed with it. Only one staff member was uncertain as to how to respond to this question. As a result, 93 per cent of the staff responded positively to this question by either agreeing or strongly agreeing with the statement. Only 7 per cent of staff responses were uncertain about this particular question.

Questions 61 to 66 were prefaced with the statement "While we were developing the evaluation project, I felt that:". This statement introduced a number of questions designed to review general issues at stake in the

in the development of the evaluation project. The responses to these statements when analyzed comparatively can be used to compare general responses to the questionnaires designed to measure the five variables before and after this second progress report. This comparison allows this researcher to determine if any changes in staff attitudes occurred between the initiation of the project and one year after the project had been running.

Question 61:

Our working experience at Children's Foundation would be helpful to other agencies working with children.

This particular question once again attempted to measure staff commitment to the evaluation project. Again, staff generally responded positively to this statement with two staff strongly agreeing with it and nine staff agreeing with it. Of the remaining three staff who responded to this question, two were undecided about the statement and only one staff member disagreed with it. Consequently, 79 per cent of the staff responded positively to this statement and indicated that they believed the Children's Foundation experience would be helpful to other agencies working with children. 14 per cent of the staff were undecided about this question and 7 per cent responded by disagreeing with the statement.

Question 62:

The project would help us consolidate our treatment philosophy.

This question was designed to measure the concept of need and staff perceptions of the need for this project in consolidating the treatment philosophy. The responses to this question can be compared loosely to the

responses for questions 23 and 24 which also addressed the question of agency goals and treatment goals.

The responses to Question 62 were generally positive with staff believing that the evaluation project would assist staff in consolidating agency treatment philosophies. Three staff strongly agreed with this statement while eight staff agreed with it. The remaining responses to this question included two staff who were undecided about the statement and one staff member who disagreed with the statement for a total of fourteen responses. This represented 79 per cent of the staff who responded to this particular question positively, with 14 per cent undecided and 7 per cent disagreeing with this statement. In comparing the results of this question with Questions 23 and 24 it is possible to see that 79 per cent positive responses to this particular question compare favourably with the 71 per cent positive responses in Question 23 and the 71 per cent of positive responses in Question 24. In Question 23 the majority of the staff agreed with the statement that the evaluation project would help re-define the goals of treatment. Similarly the positive responses in Question 24 indicate that the majority of staff felt that the evaluation project would help re-establish the goals of the agency. The consistency of staff responses to these questions suggest that staff did view the evaluation project as a means of consolidating, clarifying or re-defining agency goals.

Question 63:

The project would offer me an opportunity
to improve my helping skills.

This particular question addressed the concept of commitment and attempted to measure the degree to which staff were committed to the project as a

means of improving their helping skills. The thirteen staff who responded to this question responded positively with one staff member strongly agreeing with the statement and eleven staff members agreeing with it. This left only one staff member who was undecided about this statement. As a result, 93 per cent of the staff responded positively and agreed with the statement indicating that they believed the evaluation project would offer an opportunity to help them improve their helping skills. Only 7 per cent of the staff responses were undecided about this statement.

When the responses to this question are compared with the responses to Question 1, which asked staff about their feelings about improving services to families, the response rates are similar. In Question 1, 85 per cent of the staff felt that the evaluation project would assist the agency in improving services to families. Similarly, in this particular question, the majority of the staff felt that the evaluation project would help the individual to improve his helping skills. The consistency between these two questions and the underlying themes of improving services to families and helping skills suggests that staff did see the evaluation project as a means of improving services to families.

Question 64:

The project generated alot of discussion.

This particular question was designed to measure the amount of discussion that occurred in the agency as a result of the evaluation project. The responses to this question again spread across the whole spectrum of possible responses, with one staff member strongly agreeing with it, seven staff members agreeing with it, five staff members being undecided about the

and one staff member disagreeing with the statement. As a result 58 per cent of the staff responding to this question responded positively, agreeing with the statement that the project generated alot of discussion. On the other hand, 35 per cent of the staff were undecided about this question and 7 per cent of the staff disagreed with it.

When the responses to this question are compared to the responses to Question 54, regarding informal discussions that occurred between co-workers, the comparison is interesting. It appears in Question 54 that 50 per cent of the staff remember having informal discussions about the evaluation project and 50 per cent do not recall any such discussions. In comparison with the response to this question, the percentage of staff who recall there being many discussions or a great deal of discussion is again 58 per cent. As a result, the staff division on responses to these statements over the amount of discussion about the evaluation project is consistent through these two questions. It appears that 50 per cent of the staff recall having informal discussions and 58 per cent of the staff recall there being alot of discussion about the project. Whether these are the same staff it is unclear and the degree of discussion according to staff perceptions is also unclear.

Question 65:

The project would provide more insight
into how to help families.

The responses to this question were generally positive with two staff strongly agreeing with the statement and eleven staff agreeing with it. Only one of the fourteen respondents was undecided about this question. As a result, 93 per cent of the staff were in agreement with this statement

and indicated that they believed the evaluation project would provide insight into how to work with families. Only 7 per cent of the staff were undecided about this statement.

When the results of this question are compared with the results of Questions 5 and 7, similar trends can be seen to exist. In both these questions 100 per cent of the staff responses indicated that staff believed that the evaluation project would help identify new alternatives for working with families, assist in planning for families and provide more insight into how to help families. Thus, the underlying trends in these questions about providing improved services, identifying new methods and gaining more insight into how to help families are consistent. Staff did view the evaluation project as a means of improving services and developing new techniques for working with families.

When this question is compared with Question 21, the trend remains the same with 93 per cent of the respondents to Question 21 indicating that they felt the project would provide direction for working with families. It is possible to conclude as a result of all these comparisons that staff viewed the evaluation project as a means of improving services and saw this as a positive aspect of the project itself.

Question 66:

The project offered me an opportunity to
help formulate policy for the agency.

This question again attempted to measure staff involvement in the project. The responses to this question varied significantly across the spectrum of possible responses. One staff member responded by strongly agreeing with

the statement while five staff agreed with it. Six staff were undecided about the statement while one staff member disagreed with it. A final staff member strongly disagreed with this statement. As a result, 43 per cent of the staff responses agreed with this statement indicating that they felt the evaluation project would offer them an opportunity to help formulate agency policy. On the other hand, 43 per cent of the staff were undecided about this particular question and 14 per cent strongly disagreed or disagreed with the statement.

When the responses to this question are compared with earlier questions about agency policy and staff roles in helping to define these policies, interesting comparisons develop. Question 2 also asked staff views on the role that the evaluation project offered staff in defining agency goals and priorities. The results were somewhat different with 56 per cent of the staff feeling that the evaluation project offered staff such an opportunity. On the other hand, 29 per cent of the staff were undecided on this question compared to the 33 per cent of the staff in Question 66 who were undecided about what opportunities the evaluation project might offer them in formulating agency policy. Again, the comparison between those who did not see the evaluation project as such an opportunity are comparable. 14 per cent of the staff responding to this question disagreed with the statement while 19 per cent of the staff responding to Question 2 disagreed with the statement in that question. As a result there are significant differences between these responses by staff. These differences may reflect changes over time from the initiation of the evaluation project to the publication of this second progress report. Significantly, the differences increase over time rather than decrease. As a result it appears that staff were less positive

about what role they might have in formulating agency policy as time rolled on.

Questions 67 to 69 were prefaced with the statement "Contrary to many of my co-workers, I did not believe that:". In presenting this series of questions to the staff, it became obvious to this researcher that the wording of this introductory statement and the subsequent wording of the questions themselves created difficulties for staff in answering the questions. As a result, in the bivariate analysis of these questions, these questions are routinely scored as zero since their reliability cannot be trusted. In this univariate analysis it is worth commenting on these questions with the cautionary note that the interpretation of these three questions is very tentative.

Question 67:

The project would provide a more objective basis for making changes in the agency.

This question was designed to measure staff resistance to the evaluation project. In responding to this question staff responded by stating that they did not believe the evaluation project would provide a more rational basis for making changes at the agency. Of the thirteen staff who responded to this statement, eleven staff disagreed with it and two staff were undecided. As a result 85 per cent of the staff responses disagreed with this particular statement while 15 per cent were undecided. If this researcher interprets the double negatives in both the leading statement and the staff responses, this statement appears to indicate that staff did believe that the project would make a more objective basis for making changes in the agency. The lead statement to this particular question suggested to the

respondents that many of the respondents' co-workers might have felt that the evaluation project would provide a more objective means for making changes in the agency. The lead statement, however, asks the staff member to respond stating that contrary to the beliefs of his co-workers this individual did not believe that the project would provide a more objective basis for making changes in the agency. By disagreeing with this statement the staff indicate that in fact they must have believed that the evaluation project would provide a more rational basis for decision making. Again, this interpretation is tentative because of the double negatives involved in the lead statement to this question.

Question 68:

The project would provide a means of making better decisions in the agency.

This particular question was designed to measure staff perceptions of the need for the evaluation project. Again, the negative in the lead statement to this question created difficulty in interpreting the results to this question. In responding to this statement staff should be indicating that they did not believe that the evaluation project would provide a better means for making decisions in the agency. Of the fourteen responses to this statement, one staff member agreed with the statement while two staff members were undecided about the statement. Nine staff members disagreed with it and two staff members strongly disagreed with the statement. The interpretation of these results seems to indicate that the majority of the staff did believe that the evaluation project would provide a better means of making decisions at the agency, since they disagreed with the statement in the question. In other words, they disagreed with the statement that they did not believe that the evaluation project would provide a better

means of making decisions in the agency. 14 per cent of the staff responded to this question by indicating they were undecided about it and 7 per cent of the staff agreed with the statement, and 69 per cent disagreed with it.

Question 69:

The discussions we had about the project affected the decision to implement the project.

This particular question was initially designed to measure staff involvement in the evaluation project and the degree to which they felt they were able to affect the decision to implement the evaluation project. In presenting this particular question to staff this researcher was forced to change the presentation of this question and re-word it to read "The discussions we had about the project did not affect the decision to implement the project". In addition, this researcher had to direct staff to respond to this particular question as a flat statement, ignoring the previous lead statement. Despite this re-direction for this particular question, this researcher interprets the results and responses to this question cautiously because of the difficulties in presenting the statement to staff.

Thirteen staff responded to this question with nine staff disagreeing with the statement, one staff member being undecided and three staff members agreeing with it. The nine staff who disagreed with this statement indicate that they believed that the discussions about the project did affect the decision to implement the project and that their contributions to the evaluation project were considered in designing it. As a result this question seems to indicate that staff felt they had an impact on the project. The results indicate that 69 per cent of the staff disagreed with this statement and believed that they had an impact on the evaluation project.

8 per cent of the staff, on the other hand, were undecided about this question and 23 per cent of the staff disagreed with it.

Questions 70 to 72 were preceded by a statement from the evaluator indicating that one of the concerns of evaluation studies is frequently the question of accountability for services provided by agencies. This is clearly one of the issues that the evaluator considered in designing the project .

Question 70:

I was pleased that the agency was conducting research into the work we do with emotionally disturbed children and their families.

This particular question was designed to measure the degree to which staff were committed to the concept of evaluating the services the agency provided. Of the fourteen responses to this particular statement, all the responses were positive with five staff strongly agreeing with the statement and nine staff agreeing with it. As a result 100 per cent of the staff responses indicated that the staff were pleased that the agency was doing research into the services the agency provided. As a result this demonstrates an overall commitment of staff to the evaluation project.

Question 71:

I wanted to learn more about working with families, but was afraid that the project would put my job on the line.

This particular statement was designed to measure staff resistance to the evaluation project and their fears about their job security. Twelve staff responded to this particular question with the majority of staff disagreeing

with the statement, indicating that they were not afraid that the evaluation project would threaten their jobs. Three staff strongly disagreed with the statement, seven staff disagreed with it and the remaining two staff were divided equally between being uncertain about the statement and strongly agreeing with it. As a result, 83.3 per cent of the staff disagreed with this statement or strongly disagreed with it indicating that they were not afraid that the evaluation project would result in the loss of their jobs. 8.3 per cent of the staff were undecided about this question, and the last 8.3 per cent of the staff strongly agreed with the statement.

When the results from this question are compared to the results for Question 10 it is possible to see a different pattern of responses. Question 10 asked staff if they were concerned about what would happen to the agency if families were shown to be doing poorly at the Children's Foundation. Although this particular question focused on the period after discharge, staff were none the less not as positive in their responses about the potential dangers to the agency if families were failing after discharge. Of the thirteen responses to this question, 62 per cent of the staff expressed concern about what would happen to the agency if families were shown to be doing poorly after discharge. On the reverse side of the coin, 83 per cent of the responses to Question 71 showed that staff did not fear the loss of their jobs over the results of the evaluation project. As a result, in Question 10 staff were expressing concern about what would happen to the agency if families were shown to be doing poorly and yet in Question 71 staff did not seem to be afraid about the evaluation project placing their jobs in jeopardy.

When this question is compared with the responses to Question 55 a similar divergence in staff responses occurs. In Question 55, 62 per cent of staff responses indicate that staff were not concerned about the evaluation project on their jobs. This compares somewhat favourably to the 83 per cent of staff responding to this question who showed no fear about the loss of their jobs. However, 31 per cent of the staff responses to Question 55 did express concern about the impact that the evaluation project would have on their jobs at the Children's Foundation. As a result a large proportion of staff were concerned about the impact of the project on the program at Children's Foundation.

If these three questions are considered together, it is possible to see that a percentage of staff were concerned about the effects of the evaluation project on the agency and their jobs but they did not appear to be directly threatened about the possible loss of their jobs. While the questions are not directly comparable due to the different content of each question, the general differences in staff responses may be compared. These results reveal two possible findings. By 1978 the staff may not have been as afraid about the impact of the evaluation project since it had operated over a one year period without producing any dramatic changes in the agency operation. A second possible conclusion is that staff were not threatened about the possible loss of their jobs over the evaluation project although they might still have concerns in 1978 about the impact that the evaluation project would have on their jobs. In addition, it is possible to see that staff expressed concerns about the impact on the agency but did not apparently personalize it in terms of a loss of job security.

Question 72:

I felt that the project would make us more accountable for our services to families.

This particular question was designed to measure staff perceptions of the need for the evaluation project. Fourteen staff responded to this question with the majority of the responses being positive. Two staff strongly agreed with the statement while nine staff agreed with it. Three staff were undecided about this statement. As a result, 79 per cent of the staff responded positively to this question, indicating that they felt the evaluation project would contribute to agency accountability. Only 21 per cent of the responses to this question were undecided.

When the responses to this question are compared to the responses to Question 51, it is obvious that staff believed that the evaluation project would address issues of accountability for services. In responding to Question 51, all staff felt that the agency should be accountable for the services it provides families. Once accountable for services, Question 72 indicates that a majority of staff believed that the evaluation project would increase the degree of agency accountability.

Questions 73 to 75 were prefaced with a statement from Doyle's progress report in 1978 mentioning the cutbacks and closures that had occurred in many residential centres. The quote also indicates that many agencies were feeling particularly vulnerable due to the many closures that had occurred. This researcher then prefaced these final three questions with the statement "I thought that:". This was designed to encourage staff to reconsider the concepts of assisting workers in working with families, the motives for the

project and the willingness of the agency to review the services it provides.

Question 73:

The project would assist me in working
with families.

This particular question was designed to measure staff commitment to the concept of using the evaluation project to assist staff in working with families. Of the thirteen staff who responded to this statement, one staff strongly agreed with the statement and eleven staff agreed with it. Only one member of staff was undecided about whether or not they thought the evaluation project would assist them in working with families. As a result the responses to this particular question indicate that 93 per cent of staff responses were positive, indicating that staff believed the evaluation project would assist them in working with families. Only 7 per cent of the responses were undecided.

When the results of this question are compared to earlier responses to similar statements, it is possible to see that trends do occur. In responding to Question 11, 100 per cent of staff responses were positive and staff agreed with the statement indicating that they were interested in evaluating their own work. Question 65 obtained a positive response rate of 93 per cent in which staff agreed that the evaluation project offered them an opportunity to gain more insight into how to help families. These two questions compare favourably to this particular question in which 93 per cent of the staff agreed with the statement that the evaluation project would assist staff in working with families. As a result it is possible to conclude that the staff at the agency did believe that the evaluation

project would contribute to their abilities to help and work with families.

Question 74:

The real motives for the project were to demonstrate the effectiveness of our service and to prevent the closure of the agency.

This particular question was designed to measure staff resistance to the evaluation project. Staff were almost equally divided in their responses to this statement. Six staff disagreed with the statement and one staff member strongly disagreed with it. On the opposite side of the coin, two staff strongly agreed with the statement and four staff agreed with it. Only one of the fourteen respondents was uncertain about this particular statement. As a result, staff responses are split on this statement with 43 per cent of the staff agreeing with the statement and 50 per cent of the staff disagreeing with it. This represents a significant split in staff opinions about the supposed motive for the evaluation project.

When the results of this particular question are compared to those of Question 44, a different pattern emerges. In Question 44, twelve of the fourteen staff, or 86 per cent of staff responses disagreed with the statement that there were "unstated motives" for the evaluation project. As a result, Question 44 seems to indicate that staff did not believe that there were unstated motives for the evaluation project. As a result the staff split on the statement that the real motive for the project was to demonstrate the effectiveness of the agency and prevent its closure is interesting, since the responses to the previous question on motives does not seem to indicate any split in the staff about the motivations for the

evaluation project.

Question 75:

The project demonstrated our willingness to review and improve our program.

This particular question was designed to measure staff commitment to the concept of reviewing and improving the agency program. In responding to this particular question staff were generally positive with six staff strongly agreeing with the statement and seven staff agreeing with it. Only one staff member of the fourteen respondents was uncertain about this particular question. As a result, the overall responses to this particular question indicate that 93 per cent of the staff believed that the evaluation project would demonstrate the agency's willingness to review and improve its services. Only 7 per cent of staff responses were uncertain on this question.

Basically, this concludes the initial univariate analysis, excluding the one additional question that the evaluator asked all staff to respond to. This question related to the format used to present and review staff experiences of the implementation of the evaluation project. This researcher asked staff to respond to a statement worded roughly "The format helped me recall my feelings about the evaluation project". This statement was designed to measure staff feelings about how well they were able to recall their experiences of the evaluation project and gave this researcher some measure of reliability in staff responses. Staff were asked to respond on a simple yes/no scale. The responses indicated that thirteen of the fourteen respondents found the format helpful in recalling their experiences of the introduction of program evaluation into the agency. Only one staff member

did not believe that this method of aided recall helped them in remembering their feelings about the implementation of the project. Finally, eleven of the fourteen respondents indicated on the separate sheet that they had no previous experiences with evaluation studies, while only three staff members had had such experiences. Consequently, the majority of the staff were new to the concept of program evaluation.

b) Results: Bivariate Analysis

The bivariate analysis performed by this researcher is designed to measure staff responses by occupational grouping to the five variables defined earlier in this research project. This analysis involves the use of the Kolmogorov-Smirnov significant test to determine whether the differences in the responses are significant and reflect different population feelings about the evaluation project. The seventy five questions presented to the staff are divided according to the five variables with each question representing a specific variable that it is designed to test. These tests and the responses to these five variables provide some of the answers to the tentative hypotheses developed by this researcher.

The scores for staff responses to each of these five variables are added to obtain total scores for staff on all the questions relating to each of the variables. These scores are then presented broken down by occupational grouping to demonstrate the opinions staff expressed on each of the five variables. The purpose of this type of analysis is to determine the degree to which the variables that this researcher developed explain the implementation of the evaluation project at Children's Foundation and staff responses to this project.

For some of the hypotheses, specific scores are computed for specific questions in the questionnaire. These scores are based on the degree of agreement or disagreement with the statements relating to major concepts presented by this researcher - the five variables of resistance, commitment, need, discussion and involvement. These scores are used to determine the

degree to which staff responses indicate that the staff were resistant or committed, for example, to the concept of the evaluation project. These scores are presented as totals out of the total number of possible responses that staff could make for each variable, and then presented in percentage format. In addition where scores are missing or unavailable, these scores are identified.

To present staff responses to specific questions this researcher opted to present positive or supportive responses as those "agreeing" with the questions or statements in each variable and negative responses as those disagreeing with the particular statement. If this project presents a group of staff responses as agreeing with a statement, basically what is meant is that the staff were not expressing negative reactions to the project or to the concept being measured.

1. Resistance

Resistance is defined by this researcher as the "disinclination of staff to support or become involved in the evaluation project". As a result the questions in the questionnaire that relate to this concept are designed to measure the degree to which staff were unwilling to be involved in the evaluation project.

In the problem definition section of this research project this researcher presented five hypotheses relating to the concept of resistance. Each of these hypotheses explore the degree of resistance in the staff to the evaluation project in 1977. This researcher hypothesized that, based on the

literature on loss and change, the introduction of program evaluation to the Children's Foundation represented a significant change in agency functioning and as a result was resisted. The five hypotheses presented an attempt to determine the validity of this general thesis.

a. Hypothesis 1

The degree of resistance to the evaluation project varied according to occupational group.

In analyzing the staff responses, this researcher identified fifteen specific questions which related directly to staff acceptance of or resistance to the introduction of program evaluation in the agency. (These fifteen questions are outlined in Appendix 4). The next step in the exploration of this particular problem is to examine the staff responses by occupational grouping to determine the degree to which staff groups felt or expressed resistance to the evaluation project.

The application of the Kolmogorov-Smirnov statistical test requires the development of cumulative frequency tables for the two occupational groups available for analysis in this research project - the child care counsellors and the supervisors. As a result this researcher developed the following table which provided the cumulative frequency distribution plus the statement of the significance of these calculations according to the Kolmogorov-Smirnov tests.

The table provides a summary of the cumulative scores for each occupational group. The numbers across the top row indicate the cumulative score for each individual on the questions being added. The next two rows indicate

the occupational categories being compared and the fourth row provides the cumulative frequency differences for the use in Kolmogorov-Smirnov test. In the second and third rows the whole numbers indicate the number of individuals who obtained the score in question while the decimal figures provide the cumulative frequencies.

As an example Table I provides this information. By reading down the second column (the first column merely provides the identifying data) it is possible to see that one supervisor (n_1) obtained a score of 21. The frequency for this case is .250 (one out of four individuals). In the second column one child care worker (category n_2) obtained a score of 27. As a result the cumulative frequency for this individual is .100 (one out of ten child care staff). The bottom line identifies the step function (frequency) which for the column with a score of 21 is .250 and for the column with a score of 26 this figure is .150 (.250 from the previous column - .100 for this column). In the case of Table I the highest difference step function is .600 under the score of 31. The calculation of statistical significance is based on the difference between these two scores.

TABLE I
BIVARIATE TABLE FOR: Resistance by Occupational group
(General Resistance)

Frequency Table													
	21	25	26	27	28	31	32	34	35	36	39	43	Totals
n_1 1*	1	0	0	1	1	1							4
	.250			.500	.750	1.0							
n_2 3**	0	1	1	0	0	1	1	1	2	1	1	1	10
		.100	.200			.300	.400	.500	.700	.800	.900	1.0	
D	.250	.150	.050	.300	.450	.700	.600	.500	.300	.200	.100	0	14

* - Supervisory Staff

** - Child Care Staff

Significant @ .10p
Calculation 109

Table I demonstrates that the child care counsellors scored generally higher and therefore more negatively on the fifteen questions relating to the concept of resistance. Consequently it is possible to state that the child care counsellors expressed more concern and resistance to this evaluation project when it was introduced to the Children's Foundation. The Kolmogorov-Smirnov test indicates that the differences in staff responses are significant at the .10p level of probability which is a significant difference in the scores. By simply looking at the table it is possible to see that the majority of child care workers' scores under category 3 are higher than the supervisory scores under category 1. Consequently it is possible on the basis of these results to reject the hypothesis of no difference between these two occupational groups and accept the hypothesis presented by this researcher, that the degree of resistance varies by occupational group. The child care workers were clearly less receptive to the evaluation project as it was introduced to the Children's Foundation.

b. Hypothesis 2

Child care staff at the agency responded more negatively to the evaluation project than other staff.

By referring to Table I it is possible to see that this hypothesis can also be accepted since the child care staff scores are significantly higher than the supervisory scores indicating that the child care workers did respond more negatively to the evaluation project. As a result it is possible to accept the hypothesis presented by this research project and reject the hypothesis that no difference exists between the scores of the child care workers and supervisors. Child care workers were clearly less receptive and more resistant to the evaluation project in 1977.

c. Hypothesis 3

Child care staff at the agency felt more threatened by the evaluation project.

To answer this question this researcher examined the impact that staff believed that the evaluation project would have on the staff at Children's Foundation. The concept of impact indicates the degree to which staff felt that the evaluation project would change or impact their jobs at the Foundation and as a result the degree to which staff felt threatened by the evaluation project. This researcher developed the analysis presented in Table II which presents staff responses by occupational group around the question of the impact that the evaluation project would have on the staff at the agency.

Resistance by Occupation

BIVARIATE TABLE FOR: (Impact of Project)

Frequency Table		2	3	6	7	8	9	10						Totals
n_1	1*	1	1	0	1	0	1	0						4
		.250	.500		.750		1.00							
n_2	3**	0	0	2	2	3	2	1						10
				.200	.400	.700	.900	1.00						
D		.250	.500	.300	.350	.050	.100	0						14

* - Supervisory Staff

** - Child Care Staff

Significant @ .30p
Calculation 113

N.B. Decimal figure represents cumulative frequency for each group.

This table demonstrates that the child care workers generally scored higher on the questions relating to the potential impact that the evaluation project would have on their jobs at the Children's Foundation, but that the differences in these scores according to the Kolmogorov-Smirnov test were not statistically large enough to be significant. The same results may occur by chance significantly often enough to rule out the existence of any significant differences between the occupational groups. Consequently, it is not possible to reject the null hypothesis of no difference in favour of the alternate hypothesis presented by this researcher. Although the child care staff did score higher on the questions of the impact of the evaluation project, these differences were not large enough for this researcher to be able to conclude that the child care staff were more threatened by the evaluation project than the supervisory staff.

d. Hypothesis 4

The introduction of program evaluation was met by general resistance from the staff.

To determine the level of general resistance to this evaluation project this researcher totalled the scores for all staff across the fifteen questions that related to the concept of resistance. By arriving at a total number of scores that either agree, disagree or are undecided it is possible to determine to what degree staff were generally resistant to the evaluation project. It is important in totalling these scores to remember which questions are to be reverse scored since this will vary the totals according to the number of staff agreeing and disagreeing with the specific statements. In other words, for some statements, by agreeing with the statement the staff member is expressing resistance or concern about the introduction of

the evaluation project. On other questions, however, by agreeing with the statement the staff member is demonstrating acceptance of the evaluation project. The total number of scores possible is two hundred and ten. (fourteen staff members times fifteen questions relating to the concept of resistance equals two hundred and ten). Of this total, one hundred and eleven staff responses were positive indicating agreement with the statements relating to the evaluation project and as a result showing acceptance of the introduction of the evaluation project. Forty staff responses of the total were undecided and thirty-one staff responses disagreed with the statements indicating that the staff members were resistive to the evaluation project. This left a total of twenty-eight staff who were unable to respond to some of the statements in this research project. Consequently, 52.8 per cent of the staff responses were positive and supportive of the evaluation project while a total of 14.7 per cent of staff responses were negative or expressing resistance to the evaluation effort at the Children's Foundation. Even if all the staff responses in the undecided, disagree and blank (unavailable) responses are added together to represent all those who were directly resistant or passively resistant to the evaluation project this still shows that only 47.2 per cent of the staff could not or would not support the evaluation effort and were therefore resistant to its development. As a result it is possible to reject the research hypothesis that the evaluation project would be met by general resistance.

e. Hypothesis 5

The staff at the Foundation expressed concern with regards to the motivation for the evaluation project.

TABLE III

BIVARIATE TABLE FOR: Resistance by Occupational Group,
Motives for Project

Frequency Table												
	9	10	12	13	14	15						Totals
n_1 1*	1	1	0	0	2	0						4
	.250	.500	---	---	1.00	---						---
n_2 3**	0	3	1	3	1	2						10
		.300	.400	.700	.800	1.00						---
D	.250	.200	.100	.200	.200	0						14

* - Supervisory Staff

Significant @ .70p

** - Child Care Staff

Calculation 112

N.B. Decimal figure represents cumulative frequency for each group.

Table III presents the results of staff responses by occupational group to the motives for the project. The totals for the staff responses to questions about the motives for the evaluation project are also provided by occupational group to see if either of the two occupational groups had any more specific concerns about the motives for the project. These total scores are a result of the computer program totalling the scores for Questions 6, 33, 44, 49 and 74.

As Table III demonstrates, the results for these two occupational groups are insignificant with the probability of .70p which indicates that the same results could be obtained with equal likelihood by chance alone 70 per cent of the time. There are no significant differences between staff perceptions about the motives for the evaluation project. As a result it is possible to reject the research hypothesis that staff concerns about the

motives for the project. In addition it is possible to conclude that no differences exist between the two occupational groups.

When this researcher examined the totals question by question, out of a total of seventy possible staff responses (fourteen staff times five questions), forty-six staff responses agreed with the statements indicating that the staff did not feel any concern about the motives for the evaluation project, twenty-one staff responses disagreed with the statements and three staff responses were undecided about the statements on the motives for the evaluation project. Again, these scores are reverse scored to represent the positive scores as showing no resistance or concern about the evaluation project and the negative scores to represent concerns about the motives for the evaluation project.

The only significant score in this particular series of questions is the response to Question 74 about the real motives for the evaluation project being to demonstrate the effectiveness of the agency program to defend it against closure. Here, the staff were divided evenly between agreeing with and disagreeing with the statement indicating some suspicions on staff members' part that the evaluation project was motivated by a means of demonstrating agency effectiveness and fending off agency closure.

These results when turned to percentages show that 65.7 per cent of the staff responses were not concerned about the motives for the evaluation project, while 30 per cent of the staff responses had some concerns and 4.3 per cent of staff responses were undecided about the motives for the evaluation

project. Once again, staff responses did not vary significantly by occupational grouping.

2. Commitment

This concept was developed by this researcher to measure the degree to which staff were willing to make a commitment to the evaluation project and work constructively towards its implementation. As the definition states, commitment represents staff willingness to make "a commitment to the development of the evaluation project".

a. Hypothesis 6

The degree of commitment to the evaluation project varied according to occupational group.

TABLE IV

BIVARIATE TABLE FOR: Commitment by Occupational Group
(General Commitment)

Frequency Table

	21	24	25	26	28	29	30	31	32	33	35		Totals
n_1 1*	2 .500	1 .750	1 1.00	0	0	0	0	0	0	0	0		4
n_2 3**	0	0	0	1 .100	1 .200	2 .400	1 .500	2 .700	1 .800	1 .900	1 1.0		10
D	.500	.750	1.00	.900	.800	.600	.500	.300	.200	.100	0		14

* - Supervisory Staff

** - Child Care Staff

Significant .01p

Calculation 114

N.B. Decimal figure represents cumulative frequency for each group.

Table IV presents the degree of commitment to the evaluation project by occupational group. As the table indicates, there is a significant difference in staff responses to the fifteen questions which were designed to measure the commitment of staff to the evaluation project. Consequently, on the basis of this table, it is possible to state that the null hypothesis of no difference in commitment to the evaluation project by the different occupational groups can be rejected and the hypothesis presented by this researcher accepted. Hypothesis 6 can be accepted since it is obvious from reviewing the results of this table that the child care workers and the supervisors varied in the degree of their commitment to the evaluation project. The variation is significant at the .01 level of probability. As a result, it is possible to accept Hypothesis 6 that the degree of commitment to the evaluation project did vary according to occupational grouping.

b. Hypothesis 7

The child care staff at the agency demonstrated less commitment to the evaluation project than other staff.

Once again, on the basis of Table IV it is possible to reject the null hypothesis and accept this alternate hypothesis. Table IV demonstrates that the child care staff scored higher and therefore more negatively on the questions relating to commitment to the evaluation project. As a result it is possible to state that the child care staff were less committed to the evaluation project. The results of the Kolmogorov-Smirnov test indicate that this variation in staff commitment is significant at the .01 level of probability.

c. Hypothesis 8

The degree of commitment to the evaluation program was generally low among staff.

To answer the question raised by this hypothesis this researcher again resorted to the totalling of staff responses on the question of commitment. Of the possible two hundred and ten responses to this question, one hundred and eighty-one responses were positive indicating a high level of staff commitment to the evaluation project. This represents a total of 86.2 per cent of the staff responses indicating that the staff were highly committed to the concepts of the program evaluation project. 10 per cent of the staff were undecided about the evaluation project, representing twenty-one responses and 4.8 per cent of the staff responded negatively to the questions on commitment, representing ten responses. As a result of these findings it is possible to accept the null hypothesis and reject the hypothesis presented by this researcher that the degree of commitment would be low. In this case, the commitment to the evaluation project was high among staff.

In addition to the general level of commitment, this researcher also examined four additional concepts explored in the questionnaire which are staff commitment to reviewing agency goals, improving services, improving individual work and interest in participating in the evaluation project.

i. Interest in Participating in Evaluation

This category represents the cumulative totals for Questions 11, 14 and 59. Of the total number of possible responses (forty-two), thirty-six staff responses were positive, indicating a desire to participate in the project while two staff responses were undecided. This left four staff responses which were unavailable for this particular question. When these

results are computed in percentages the staff who were interested in participating in the evaluation project represented 85.7 per cent of the staff while those who were undecided represented 4.8 per cent of the staff and those who were unable to respond to these questions represented 9.5 per cent of the possible responses. Consequently, it is possible to conclude from the analysis of these three questions that staff were interested in participating in the evaluation project.

TABLE V

BIVARIATE TABLE FOR: Commitment by Occupational Group
(Interest in Participation in Evaluation)

Frequency Table

	0	3	4	5	6	7							Totals
n_1 1*	1	1	2	0	0	0							4
	.250	.500	1.00										
n_2 3**	0	0	0	1	8	1							10
				.100	.900	1.00							
D	.250	.500	1.00	.900	.100	0							14

* - Supervisory Staff Significant @ .01p

** - Child Care Staff

Calculation 117

N.B. Decimal figure represents cumulative frequency for each group.

Table V provides the breakdown of staff responses to these questions by occupational groups and demonstrates that the child care workers were generally less interested in participating in the evaluation project. The differences between these two occupational groups were significant at the .01 level of probability indicating that the differences in interest in participating in the project were significant.

ii. Improving Services

This calculation represents the cumulative scores for Questions 1, 63, 73 and 75. Of the total number of fifty-six responses that were possible, forty-nine of the responses were positive indicating that the staff were generally committed to the concept of improving services at the agency and saw the evaluation project as a means of doing so. Five of the respondents were undecided about this particular aspect of the evaluation project and one individual was unable to answer a question. By percentages, 87.5 per cent of the staff responses were interested in improving services, 8.9 per cent of the responses were undecided and 2.8 per cent were unable to respond to these statements.

TABLE VI

BIVARIATE TABLE FOR: Commitment by Occupational Group
(Improvement of Services)

Frequency Table													
	3	5	6	7	8	11							Totals
n ₁ 1*	1	1	1	1	0	0							4
	.250	.500	.750	1.0									
n ₂ 3**	0	0	1	4	4	1							10
			.100	.500	.900	1.0							
D	.250	.500	.650	.600	.100	0							14

* - Supervisory Staff

** - Child Care Staff

Significant @ .10p
Calculation 118

N.B. Decimal figure represents cumulative frequency for each group.

Table VI presents the breakdown of staff responses by occupational group. By examining this table it is possible to see that once again the supervisory staff were more positively inclined to view the evaluation project as a means

of improving services and were more committed to that concept. The results of this table indicate that these differences were significant at the .10p level of probability.

iii. Improve Work

This dimension represents the cumulative scores for Questions 11, 41, 59, 63, and 73. Of the total possible responses of seventy, fifty-five responses were positive, seven were undecided and two were negative. This left a total of six individuals who were unable to respond to this particular series of questions. The totals presented above represent all the possible responses to these questions. The breakdown by percentage indicates that 78.6 per cent of staff responses viewed the evaluation project as a means of improving their own work with clients, 10 per cent of the staff responses were undecided if this would be the case, 2.9 per cent of the staff responses were negative to this series of questions while 8.6 per cent of the staff responses were unavailable for this series of questions. As a result it is possible to conclude that a smaller majority of staff viewed the evaluation project as a means of improving their own work with families.

Table VII presents the results of the questionnaire on this particular dimension by occupational group. By reviewing the results on the table it is possible to see that the child care staff once again responded more negatively to this series of questions and that the differences in the response rates between the supervisors and the child care workers was significant at the .05 level of probability. As a result it is possible to conclude that the child care staff did not view the evaluation project as

TABLE VII

BIVARIATE TABLE FOR: Commitment by Occupational Group
(Improve Work)

Frequency Table													
	0	7	8	9	10	11	12	13					Totals
n ₁ 1*	1	1	1	1	0	0	0	0					4
	.250	.500	.750	1.00									
n ₂ 3**	0	0	1	1	3	2	2	1					10
			.100	.200	.500	.700	.900	1.00					
D	.250	.500	.650	.800	.500	.300	.100	0					14

* - Supervisory Staff

** - Child Care Staff

Significant @ .05p

Calculation 119

N.B. Decimal figure represents cumulative frequency for each group.

positively as a means of improving their own working skills with families as did the supervisors.

iv. Review Goals

This calculation represents the cumulative totals for Questions 25 and 75. The total number of possible responses to these questions is twenty-eight. Of this total, twenty-one staff responses were positive to these questions, three staff responses were undecided and four staff responses were negative to these questions. This represents percentages of 75.0 per cent of the staff responses which indicated that the evaluation project offered them an opportunity to review agency goals, 10.7 per cent of the staff responses

which were undecided about these questions and 14.3 per cent of the staff responses which were negative and did not see the evaluation project as a means of reviewing agency goals.

TABLE VIII

BIVARIATE TABLE FOR: Commitment by Occupational Group
Review Goals

Frequency Table												Totals
	3	4	5	6								
n_1 1*	3	0	1	0								4
	.750		1.00									
n_2 3**	1	4	2	3								10
	.100	.500	.700	1.00								
D	.650	.250	.300	0								14

* - Supervisory Staff

** - Child Care Staff

Significant @ .10p
Calculation 120

N.B. Decimal figure represents cumulative frequency for each group.

Table VIII presents the breakdown of staff responses to these questions by occupational category. Again, it is possible to see that the child care staff responded less positively to this series of questions than did the supervisors and that the differences in these response rates were significant at the .10 level of probability. This indicates that the child care staff did not see the evaluation project as a means of reviewing agency goals as positively as the supervisors did.

3. Discussion

This concept was adopted from the work of Glasser and Backer and refers to the "encouragement of open discussion by staff". The questions developed to measure the degree of discussion that occurred at the Children's Foundation were designed to determine the degree to which staff felt that open discussion occurred at the Foundation.

a. Hypothesis 9

The degree to which staff felt that discussions were useful would vary according to occupational group.

TABLE IX

BIVARIATE TABLE FOR: Discussion by Occupational Group

Frequency Table													
	26	31	34	37	38	39	40	42	44	47	54		Totals
n_1 1*	1	2	0	1	0	0	0	0	0	0	0		4
	.250	.750		1.00									
n_2 3**	0	0	1	0	2	1	2	1	1	1	1		10
			.100		.300	.400	.600	.700	.800	.900	1.00		
D	.250	.750	.650	.900	.700	.600	.400	.300	.200	.100	0		14

* - Supervisory Staff

** - Child Care Staff

Significant @ .01p

Calculation 121

N.B. Decimal figure represents cumulative frequency for each group.

Table IX presents the results of the staff responses to the questions relating to the discussions at the Children's Foundation. Once again, it is possible to see by the staff responses that the child care staff

responded less positively to the questions of the openness of the discussions at the agency. These differences are also significant at the .01 level of probability. This indicates that the child care staff did not feel that the discussions were as useful as the supervisors at the agency.

As a result of the material presented in this table, it is possible to reject the null hypothesis and to accept the research hypothesis that the child care staff and the supervisory staff had different views on the usefulness of the discussions at the agency. The child care staff did not view the discussions as positively as the supervisors did. Consequently, it is possible to conclude that the views on the usefulness of discussions about the evaluation project varied according to occupational group.

TABLE X

BIVARIATE TABLE FOR Discussion by Occupational Group, 1977

Frequency Table													
	23	28	29	30	33	34	35	36	37	39	42	47	Totals
n_1 1*	1	1	1	0	1	0	0	0	0	0	0	0	4
	.250	.500	.750		1.00								
n_2 3**	0	0	0	1	0	1	3	1	1	1	1	1	10
				.100		.200	.500	.600	.700	.800	.900	1.00	
D	.250	.500	.750	.650	.900	.800	.500	.400	.300	.200	.100	0	14

* - Supervisory Staff

** - Child Care Staff

Significance @ .01p
Calculation 122

N.B. Decimal figure represents cumulative frequency for each group.

Table X presents the results of the discussion questions specifically relating to the discussions that occurred in 1977 when the project was first introduced to the staff at the agency. This table demonstrates that the child care staff felt less positive about the discussions that occurred at the Foundation. In fact the analysis of this series of questions produces results which are significant at the .01 level of probability.

In an attempt to clarify the meaning of the results on the question of the discussions that occurred at the Foundation, this researcher completed an analysis by occupational group of the sense that the staff had about the openness of the discussions that occurred. Table XI presents the data collected in this analysis and indicates that the child care staff again responded less positively to the questions of the openness of the discussions at the Foundation.

TABLE XI

BIVARIATE TABLE FOR: Discussion by Occupational Group
(open Discussion)

Frequency Table												
	3	4	6	7	9	10						Totals
n_1 1*	2 .500	1 .750	1 1.00	0	0	0						4
n_2 3**	0	0	6 .600	2 .800	1 .900	1 1.00						10
D	.500	.750	.400	.200	.100	0						14

* - Supervisory Staff

** - Child Care Staff

Significant @ .05p

Calculation 125

N.B. Decimal figure represents cumulative frequency for each group.

The differences in the staff responses to these questions were significant at the .05 level of probability indicating that the child care staff did not feel as positively about the openness of the discussions at the agency or about their ability to influence these discussions. The results of Table XI represent the cumulative totals for all the scores of Questions 14, 28 and 30. Of the total of forty-two possible responses, twenty-three staff responses were positive to this question indicating that the discussions were open. Two staff responses were undecided while two staff responses were negative. This leaves a total of fifteen staff responses which were unavailable for this series of questions. This represents a total of 55 per cent of staff responses which indicate that the discussions were open, 4.8 per cent of the staff responses which were undecided and 4.8 per cent of the staff responses which indicate that the discussions were not open. Finally a significant percentage of staff responses, 35.7 per cent, were unavailable for this question. Overall it is still possible to conclude that on the whole 55 per cent of the staff responses indicate that the discussions were open.

An important consideration in interpreting the meaning of these results is that the child care staff still felt that the discussions were not as open as the supervisors believed they were. Consequently, the 55 per cent of the staff responses that the discussions were open probably has an over-representation of supervisors in that figure which further amplifies the concerns that the child care workers had about the openness of the discussions. Once again, this must be interpreted cautiously because a significantly large percentage of staff responses are unavailable for this series of questions. However, despite this fact the 55 per cent figure represents a

lower percentage of staff responses to the question of the openness of the discussions about the evaluation project.

b. Hypothesis 10

Child care staff felt less positive about the usefulness of the discussion about the evaluation project.

The material presented in the analysis of Hypothesis 10 provides much of the material to answer this question. The data presented in Table X underlines the feelings of the child care staff who responded more negatively to the questions about the discussions. Table XI expands on their concerns about the discussions and underlines their feelings that the discussions were not as open as the supervisors felt they were. As a result, in view of the findings presented in Tables X and XI it is possible to accept the research hypothesis and to reject the null hypothesis. The child care staff did not view the discussions about the evaluation project as positively as the supervisors did. Consequently, their responses to the questions about the discussions at the agency were more negative than those of the supervisors.

c. Hypothesis 11

The majority of staff did not feel that the discussions about the evaluation project were useful in helping resolve their anxieties about the project.

Table XII presents the cumulative results for Questions 22, 26 and 64, all of which relate to the question about how the discussions helped resolve staff concerns about the evaluation project. Initially, it is possible to see from this table that the child care staff again felt less positive about

TABLE XII

BIVARIATE TABLE FOR: Discussion by Occupational Group
Resolve Concerns

Frequency Table		4	5	6	7	8	9	10	11	12				Totals
n_1	1*	2	0	1	1	0	0	0	0	0				4
		.500		.750	1.00									
n_2	3**	1	1	0	2	1	2	1	1	1				10
		.100	.200		.400	.500	.700	.800	.900	1.00				
D		.400	.300	.550	.600	.500	.300	.200	.100	0				14

* - Supervisory Staff

** - Child Care Staff

Significant @ .20p
Calculation 124

N.B. Decimal figure represents cumulative frequency for each group.

the degree to which their concerns about the evaluation project were resolved. These differences were significant at the .20 level of probability.

The cumulative frequencies for these three questions again demonstrate that staff did not specifically feel that the discussions fully resolved their feelings about the evaluation project. Of the total of forty-two possible responses to this series of questions, twenty-one staff responses were positive indicating that the discussions did resolve their concerns, while nine staff responses were undecided and nine staff responses were negative. This left three staff responses which are unavailable to this series of questions.

When the percentages are presented the staff responses which are positive represent 50 per cent of the staff. This is a slim margin of staff who felt

that the discussions resolved their concerns about the project. On the other hand, 21.4 per cent of the staff responses were undecided about this series of questions and 21.4 per cent of the staff responses were negative on this series of questions. This leaves 7.1 per cent of the staff responses which are unavailable on this series of questions. As a result of these data it is possible to conclude that staff were equally split on the question as to whether or not the discussions were useful in resolving their concerns about the evaluation project. While 50 per cent of the staff responses were positive to this series of questions, 50 per cent did not feel their concerns were resolved or were undecided about this question. As a result it is possible to reject the research hypothesis since these results are inconclusive in either direction. The only valuable observation from this series of data is that the child care staff once again viewed the discussions as less valuable in resolving their concerns about the project.

As a final consideration this researcher also analyzed staff responses on the question of the value of the discussions. This analysis was based on the responses to Questions 4 and 16. Table XIII presents the results of this analysis by occupational group.

The results of this series of questions were insignificant with the probability of obtaining similar results by chance alone being .30p. (well above the selected level of significance of .20p). On the analysis of the total responses to this series of questions some interesting results do occur. Of the total of twenty-eight possible responses sixteen staff responses were positive while five and seven staff responses were undecided or

TABLE XIII

BIVARIATE TABLE FOR: Discussion by Occupational Group
Value of Discussions

Frequency Table													
	2	3	4	5	6	8	9						Totals
n_1 1*	1	1	1	0	0	1	0						4
	.250	.500	.750			1.00							
n_2 3**	0	0	3	3	2	1	1						10
			.300	.600	.800	.900	1.00						
D	.250	.500	.450	.150	.050	.100	0						14

* - Supervisory Staff

Significant @ .30p

** - Child Care Staff

Calculation 126

N.B. Decimal figure represents cumulative frequency for each group.

negative respectively to this series of questions. These results represent 57 per cent of the staff responses which indicated that the discussions were valuable while 17.9 per cent of the staff responses were undecided and 25 per cent of the staff responses were negative. Once again, the interpretation of these results must take into consideration the fact that the supervisory responses in the 57 per cent of positive responses must be considered carefully since the child care staff tended to respond more negatively although these response differences were not statistically significant. Supervisory responses may be over-represented in the positive response category.

3. Involvement

This researcher also adopted the concept of involvement from the work of Glasser and Backer to determine the degree to which staff felt involved in the development of the evaluation project.

The definition of involvement that this researcher adopted from these authors was the "staff involvement in participative decision making". Table XIV represents the results of the questions relating to the staff's sense of involvement in the development of the evaluation project and their ability to affect its development and implementation.

TABLE XIV

BIVARIATE TABLE FOR: Involvement by Occupational Group

Frequency Table												
	29	32	33	34	36	37	38	39	41	43	53	Totals
n_1 1*	1	1	0	1	0	0	0	1	0	0	0	4
	.250	.500		.750				1.00				
n_2 3**	1	0	1	0	1	1	2	1	1	1	1	10
	.100		.200		.300	.400	.600	.700	.800	.900	1.00	
D	.150	.500	.300	.550	.450	.350	.150	.300	.200	.100	0	14

* - Supervisory Staff
 ** - Child Care Staff

Significant @ .20p
 Calculation 133

N.B. Deciral figure represents cumulative frequency for each group.

a. Hypothesis 12

The degree of involvement in the evaluation project was perceived differently, according to occupational group.

Table XIV provides the answers to this particular question and demonstrates that the child care staff viewed their involvement in the evaluation project differently. The differences in staff responses were significant at the .20 level of probability once again demonstrating that the child care staff did feel less involved in the evaluation project than the supervisory staff.

In reviewing the results of this series of questions it is possible to see that the staff involvement in the evaluation project was viewed differently by each occupational group. Consequently, it is possible to accept the research hypothesis and reject the null hypothesis of no difference in this situation. The data collected demonstrates clearly that the different occupational categories at the Children's Foundation did view the degree of their involvement differently.

b. Hypothesis 13

The child care staff felt less involved in the evaluation project than other staff.

Again the results in Table XIV support this hypothesis and make it possible to reject the null hypothesis of no difference. Clearly the child care staff responses to the questions about their sense of involvement in the development of the evaluation project are more negative (less positive) than those of the supervisors. As a result it is possible to accept the research hypothesis that the child care staff did feel less involved in the evaluation project than the supervisors.

c. Hypothesis 14

The child care staff felt less able to influence the direction of the evaluation project than other staff.

The answer to this research hypothesis lay in the cumulative totals of Questions 27, 36, 56, 66 and 69. These five questions related to the question of how staff felt about their ability to contribute to the direction that the evaluation project assumed. Table XV presents the results of this calculation.

TABLE XV

BIVARIATE TABLE FOR: Involvement by Occupational Group
(Contribute to Direction)

Frequency Table													
	5	8	9	10	11	13	14	16					Totals
n_1 1*	2	1	1	0	0	0	0	0					4
	.500	.750	1.00										
n_2 3**	0	2	1	3	1	1	1	1					10
		.200	.300	.600	.700	.800	.900	1.00					
D	.500	.550	.700	.400	.300	.200	.100	0					

* - Supervisory Staff

** - Child Care Staff

Significant @ .10p
Calculation 136

N.B. Decimal figure represents cumulative frequency for each group.

Once again the responses of the child care staff indicate that they felt less able to influence the direction of the evaluation project. The differences between their responses and those of the supervisory staff are significant at the .10 level of probability. This means that it is possible to accept the research hypothesis that the child care staff felt less able to influence the direction of the evaluation project than the supervisors.

When the specific staff responses to this series of questions are analyzed it is possible to see that forty-two of the seventy possible staff responses were positive while fourteen responses fall in the uncertain category.

Finally, twelve staff responses are negative leaving two staff responses unavailable. When these figures are converted to percentages the results are that 60 per cent of the staff responses indicate that staff felt they were able to influence the direction of the evaluation program. 20 per cent of the staff responses were undecided about this particular series of questions while 17.1 per cent of the staff responses were negative, indicating that these staff did not feel they could influence the direction of the evaluation project. Finally, 2.9 per cent of the staff responses were unavailable for this series of questions. Despite the overall positive responses to this series of questions, the child care staff still felt less able to influence the direction of the evaluation project.

5. Need

The final variable that this researcher opted to study was the concept of need. This concept was also selected from the concepts presented in the work of Glässer and Backer for inclusion in this study. It was defined as the staff's perception of the project as being "truly valuable and needed".

a. Hypothesis 16

The staff perceptions as to the need for the evaluation project varied according to occupational group.

The results of this research hypothesis are presented in Table XVI.

TABLE XVI

BIVARIATE TABLE FOR: Need by Occupational Group

Frequency Table													Totals
	22	24	26	27	28	29	30	31	33	34			
n_1 1*	1	2	0	1	0	0	0	0	0	0			4
	.250	.750		1.00									
n_2 3**	0	0	1	1	1	1	2	2	1	1			10
			.100	.200	.300	.400	.600	.800	.900	1.00			
D	.250	.750	.650	.800	.700	.600	.400	.200	.100	0			14

* - Supervisory Staff
 ** - Child Care Staff

Significant @ .05p
 Calculation 127

N.B. Decimal figure represents cumulative frequency for each group.

The results in this table support the acceptance of this research hypothesis since it is obvious that the staff perceptions of need did vary according to occupational group. The child care staff responded less positively to the question for the evaluation project than did the supervisors. This difference in the responses of the staff were significant at the .05 level of probability. This data as a result comfortably supports the acceptance of this research hypothesis. The child care staff clearly responded less positively to the questions relating to the need for the evaluation project than did the supervisory group.

b. Hypothesis 17

The child care staff were less supportive of the need for the evaluation project.

The results presented in Table XVI support the adoption of this research hypothesis since the child care staff did respond less supportively and positively to the series of questions designed to measure the need for the evaluation project.

In addition, this researcher examined three additional areas of concern for staff to determine their perceptions of the need for the evaluation project. These additional areas of concern included the concept of staff to re-examine agency goals, to improve planning and to assess how families were doing after discharge from the agency.

i. Planning

This calculation represents the cumulative scores for all staff on Questions 5, 7, 21 and 65. Table XVII presents the data collected on this area of concern by occupational group. The differences are again significant with the child care staff presenting a less positive view of the evaluation project as a means of improving planning for the agency. These results are significant at the .10 level of probability.

When the results are analyzed by staff responses the results are significant. Of the possible fifty-six responses to these questions fifty-four responses fall in the positive category indicating that the majority of staff viewed the use of the evaluation project for planning purposes in a positive light. Two responses were undecided about this particular series of questions. The percentages for these responses are 96.4 per cent and 3.6 per cent respectively. What is significant in these results is that despite the overall positive response of staff to use the evaluation project for planning purposes

TABLE XVII

BIVARIATE TABLE FOR: Need by Occupational Group
(Planning)

Frequency Table											
	5	7	8	9							Totals
n_1 1*	1	3	0	0							4
	.250	1.00									
n_2 3**	0	3	6	1							10
		.300	.900	1.00							
D	.250	.700	.100	0							14

* - Supervisory Staff

** - Child Care Staff

Significant @ .10p

Calcualtion 130

N.B. Decimal figure represents cumulative frequency for each group.

the child care staff still viewed its usefulness in this area less positively than did the supervisory staff.

ii. Information after Discharge

This series of questions attempted to measure the degree to which staff were interested in obtaining information on the families after they were discharged from the Children's Foundation. Table XVIII presents this data by occupational group.

Here the responses of the child care staff and those of the supervisory staff were essentially the same with no significant difference in their response rates to these questions. This series of questions represents the totals for

TABLE XVIII

BIVARIATE TABLE FOR: Need by Occupational Group
(After Discharge)

Frequency Table												
	0	2	3	4								Totals
n_1 1*	1	2	1	0								4
	.250	.750	1.00									
n_2 3**	0	4	3	3								10
		.400	.700	1.00								
D	.250	.350	.300	0								14

* - Supervisory Staff

** - Child Care Staff

Significant @ .50p
Calculation 131

N.B. Decimal figure represents cumulative frequency for each group.

all staff answers to Questions 8 and 9 on the questionnaire. Of the total number of twenty-eight possible responses twenty-five staff responses were positive to these two questions while three staff responses were unavailable for these two questions. This represents a positive response rate of 89.3 per cent to a non-response rate of 10.7 per cent. Generally, it is possible to see that all staff were interested in obtaining information on families after discharge and viewed the evaluation project as a means of obtaining this information.

iii. Re-examine Agency Goals

This analysis represents the cumulative scores for all staff on questions 19 and 25. Table XIX presents the results of this cumulative score by occupational group.

TABLE XIX

BIVARIATE TABLE FOR: Need by Occupational Group
(Re-examine agency goals)

Frequency Table													
	3	4	5	6	7								Totals
n_1 1*	2	1	1	0	0								4
	.500	.750	1.00										
n_2 3**	0	5	2	2	1								10
		.500	.700	.900	1.00								
D	.500	.250	.300	.100	0								14

* - Supervisory Staff
** - Child Care Staff

Significant @ .30p
Calculation 132

N.B. Decimal figure represents cumulative frequency for each group.

The results here indicate that the differences between child care and supervisory responses on this particular issue are insignificant with a possibility of obtaining similar results of .30p. Consequently, it is possible to conclude that the supervisors and the child care workers both viewed the evaluation project positively as a means of examining agency goals. This conclusion is further supported when the analysis of the specific responses to these questions is done. Twenty-one of a possible twenty-eight responses to this series of questions were positive while only four were negative. This left three staff responses who were unable to decide on these two questions. The percentages are 75 per cent, 14.3 and 10.7 respectively. Consequently, a majority of staff believed that the evaluation project would assist the agency in re-examining its goals and priorities.

6. Analyses Over Time

Hypotheses 18 to 21 inclusive refer to differences in attitudes towards the evaluation project over time. Each of these hypotheses suggest that staff attitudes towards the evaluation project changed over time. In addition, each of the hypotheses suggest that these changes represent significant decreases or increases in staff reactions to the evaluation project over time. This researcher attempted to explore changes in staff attitudes over time by dividing the questionnaire into two clear time divisions. To achieve this division in time, this researcher used the second progress report presented by the agency evaluator since it reflected a more open reporting of staff concerns and also represented the passage of approximately one year between the initiation of the evaluation project and the second progress report. By referring specifically to this report in the questionnaire this researcher attempted to get staff to think of their reactions to the evaluation project in 1978, the time of the second progress report. If staff were able to recall their feelings about the evaluation project in 1978, this researcher felt that these staff feelings would represent significant changes from their initial reactions to the evaluation project.

a. Hypothesis 18

As the evaluation project developed, resistance to the program declined.

To measure this hypothesis this researcher compared the results of staff responses to the questions on resistance in 1977 to questions asked about this concept after the introduction of Doyle's second progress report and

specific reference to the 1978 time period. This analysis will at best be tentative, but by reviewing the differences in the responses to the questions relating to resistance in 1977 and 1978 it may be possible to conclude that staff resistance reduced over time.

TABLE XX

BIVARIATE TABLE FOR: Resistance by Occupational Group, 1977

Frequency Table

	16	21	24	25	26	28	29	30	32	37		Totals
n_1 1*	1	0	1	0	1	1	0	0	0	0		4
	.250		.500		.750	1.0						
n_2 3**	0	2	0	1	0	1	2	2	1	1		10
		.200		.300		.400	.600	.800	.900	1.0		
D	.250	.050	.300	.200	.450	.600	.400	.200	.100	0		14

* - Supervisory Staff

Significant @ .20p

** - Child Care Staff

Calculation 110

N.B. Decimal figure represents cumulative frequency for each group.

TABLE XXI

BIVARIATE TABLE FOR: Resistance by Occupation Group, 1978

Frequency Table

	2	3	4	5	6	7						Totals
n_1 1*	1	2	0	1	0	0						4
	.250	.750		1.00								
n_2 3**	0	1	1	2	5	1						10
		.100	.200	.400	.900	1.00						
D	.250	.650	.550	.600	.100	0						14

* - Supervisory Staff

Significant @ 10p

** - Child Care Staff

Calculation 111

N.B. Decimal figure represents cumulative frequency for each group.

These two tables (Tables XX and XXI) present the staff responses to these questions in 1977 and 1978 respectively. The degree of resistance in the staff in 1977 is significantly different for each occupational group and the results for 1978 are significantly different. The results for Table XX represent the cumulative totals for Questions 3, 6, 10, 13, 33, 37, 44, 47, 49, 52, 53 and 55. The results in Table XXI represent the cumulative totals for Questions 67, 71, and 74. (N.B. Question 71 was scored as zero in this particular analysis because it proved difficult to analyze in the univariate analysis). The 1978 results indicate that the staff appeared to be more resistant to the evaluation project than they were in 1977. Again, any conclusions drawn from this analysis are at best tentative since these results cannot be directly compared because of the many factors that could cause this type of variation in results over the year. The conclusions from these results appears to indicate that resistance to the evaluation project increased over the years rather than declined since the results of the 1978 questions indicate that child care staff were less positive about the evaluation project in 1978 than in 1977. This suggests that in fact the resistance increased between 1977 and 1978. This hypothesis, which suggests a decrease in the resistance over time, can be rejected. Again, this researcher cautions that this conclusion is very tentative since the comparison being made here is between the staff responses to two separate series of questions and based on the variances between occupational groups at two points in time.

b. Hypothesis 19

As the evaluation project developed in the agency, the staff commitment to the evaluation project increased.

TABLE XXII

BIVARIATE TABLE FOR: Commitment by Occupational Group, 1977

Frequency Table

	14	16	17	18	19	20	22						Totals
n ₁ 1*	3	0	1	0	0	0	0						4
	.750		1.00										
n ₂ 3**	0	2	1	3	2	1	1						10
		.200	.300	.600	.800	.900	1.00						
D	.750	.550	.700	.400	.200	.100	0						14

* - Supervisory Staff

** - Child Care Staff

Significant @ .05p
Calculation 115

N.B. Decimal figure represents cumulative frequency for each group.

TABLE XXIII

BIVARIATE TABLE FOR: Commitment by Occupational Group, 1978

Frequency Table

	7	8	10	11	12	13	14	15					Totals
n ₁ 1*	2	1	1	0	0	0	0	0					4
	.500	.750	1.00										
n ₂ 3**	0	0	2	1	4	1	1	1					10
			.200	.300	.700	.800	.900	1.00					
D	.500	.750	.800	.700	.300	.200	.100	0					14

* - Supervisory Staff

** - Child Care Staff

Significant @ .05p
Calculation 116

N.B. Decimal figure represents cumulative frequency for each group.

Tables XXII and XXIII provide the results for the analysis of this research hypothesis. Table XXII presents the cumulative results for Questions 1, 11, 12, 14, 20, 24, 41, 42, and 51 while Table XXIII provides the data for Questions 59, 61, 63, 70, 73 and 75. When the results of these two tables are compared, the commitment of the staff to the evaluation project appears to be unchanged over time since both the time periods represented in these tables show that the child care staff are less positive in their responses to the questions relating to staff commitment to the evaluation project. The differences are significant in both cases indicating that commitment seems to be unchanged over time. Consequently, this research hypothesis must be rejected since there does not seem to be any increase in staff commitment over time.

c. Hypothesis 20

As the evaluation project developed, staff supported the need for the evaluation project.

Tables XXIV and XXV present the results for this particular research hypothesis. In examining these two tables it is possible to observe that the apparent differences between the responses of the supervisory and child care staff reduces over time which suggests that the staff are beginning to accept the need for the evaluation project.

The results presented in these two tables represent the cumulative totals for Questions 5, 7, 8, 9, 19, 21, 23, 25, 31, 34, and 35 for the 1977 time period and 52, 65, 68 and 72 for the 1978 time period. The statistical differences between the responses of the supervisors and the child care staff decrease from .05p to .20p from 1977 to 1978 which does suggest that

TABLE XXIV

BIVARIATE TABLE FOR: Need by Occupational Group, 1977

Frequency Table													Totals
	17	19	20	21	22	23	24	25	26				
n_1 1*	1	1	1	1	0	0	0	0	0				4
	.250	.500	.750	1.00									
	0	0	0	2	1	2	2	2	1				10
n_2 3**				.200	.300	.500	.700	.900	1.00				
D	.250	.500	.750	.800	.700	.500	.300	.100	0				14

* - Supervisory Staff

** - Child Care Staff

Significant @ .05p
Calculation 128

N.B. Decimal figure represents cumulative frequency for each group.

TABLE XXV

BIVARIATE TABLE FOR: Need by Occupations Group, 1978

Frequency Table													Totals
	3	5	6	7	8	9							
n_1 1*	1	2	0	1	0	0							4
	.250	.750		1.00									
	0	2	4	2	1	1							10
n_2 3**		.200	.600	.800	.900	1.00							
D	.250	.550	.150	.200	.100	0							14

* - Supervisory Staff

** - Child Care Staff

Significant @ .20p
Calculation 129

N.B. Decimal figure represents cumulative frequency for each group.

the staff are beginning to accept the need for the evaluation project. Again, this conclusion is at best tentative and only suggests that this research hypothesis may be accepted indicating that the staff over time have started to see and support the need for the evaluation project.

d. Hypothesis 21

As the evaluation project developed, staff involvement in the project increased.

TABLE XXVI

BIVARIATE TABLE FOR: Involvement by Occupational Group, 1977

Frequency Table

	24	26	29	30	32	33	34	35	38	39	45		Totals
n ₁ 1*	0	1	1	1	0	1	0	0	0	0	0		4
		.250	.500	.750		1.00							
n ₂ 3**	1	0	1	0	1	2	1	1	1	1	1		10
	.100		.200		.300	.500	.600	.700	.800	.900	1.00		
D	.100	.250	.300	.550	.450	.500	.400	.300	.200	.100	0		14

* - Supervisory Staff

** - Child Care Staff

Significant @ .20p
Calculation 134

N.B: Decimal figure represents cumulative frequency for each group.

Tables XXVI and XXVII present the data analyzed by occupational group for these two hypotheses. The staff involvement in 1977 was measured by summing the responses for staff to Questions 2, 27, 29, 32, 38, 39, 40, 43, 45, 56, and 57 while the responses for 1978 were obtained by totalling the scores

TABLE XXVIIBIVARIATE TABLE FOR: Involvement by Occupational Group, 1978

Frequency Table													
	1	2	3	4	5								Totals
n_1 1*	1	3	0	0	0								4
	.250	1.00											
n_2 3**	0	2	6	1	1								10
		.200	.800	.900	1.00								
D	.250	.800	.200	.100	0								14

* - Supervisory Staff

** - Child Care Staff

Significant @ .05p

Calculation 135

N.B. Decimal figure represents cumulative frequency for each group.

for Questions 66 and 69. These two tables indicate that the staff perceptions of their involvement in the evaluation project decrease over time since the staff in 1977 indicate that the child care staff felt less involved than the supervisory staff with a level of significance of .20 while the staff responses to these questions in 1978 decreased to .05p or in other words staff perceptions of their involvement in the evaluation project significantly declined. Again these conclusions must be viewed very tentatively since the population involved in this comparison is small and the time periods cannot be directly compared. Only the differences in staff responses can be compared.

e. Hypothesis 22

Staff opinions about the evaluation project varied less by occupational group over time.

The results presented for Hypotheses 18, 19, 20 and 21 provide the data to refute this particular hypothesis. The tables that present the data for

these four hypotheses indicate that staff opinions about the evaluation project continued to vary over time since on all four variables the results differed significantly from both occupational groups. Consequently, the data provides enough evidence to reject this research hypothesis since the data show that the staff opinions about the evaluation project continued to vary over time. Again, this researcher cautions that this interpretation is very tentative since once again the data collected on these two time periods is based on the retrospective recollections of the staff. In addition the staff opinion differences are based on staff interpretations of different questions in the questionnaire. However, if staff recall is accurate it is possible to state that these results indicate that staff attitudes about the evaluation project remained divergent even after the passage of time and the involvement of staff and the evaluator in the development of the evaluation project.

Essentially this concludes the analysis performed by this researcher on the data collected through the staff survey. Much of the material presented here is significant for other evaluators dealing with the implementation of evaluation projects in an agency. The implications of these findings are presented in the conclusions to this chapter.

FOOTNOTESD. The Analysis of the Survey Data.

1. Sidney Siegel, Non-Parametric Statistics for the Behavioural Sciences, McGraw-Hill Book Company, New York, 1956, p. 128
2. Doyle Clifton, "A Progress Report", Children's Foundation, March 28, 1977, p. 1.

E. Conclusions

As indicated in Part B of this particular chapter, this researcher decided to use the progress reports presented by the agency evaluator as a means of checking the validity of some of the findings of this research project. These reports identified a number of the issues explored by this research project through the staff questionnaires. As a result an analysis of these reports and a comparison of these reports to the findings of this research project provide a means of checking the validity of some of the findings.

On March 28, 1977, Doyle Clifton presented his first report to the staff at Children's Foundation. This report represents an attempt on the evaluator's part to present to staff in written form a summary of some of the issues discussed at the agency. As a result, this report identifies some of the concerns and issues that staff identified in their discussions about the evaluation project.

One of the first issues that the evaluator identifies as a concern for staff was the lack of information in 1977 on how families were doing after discharge. Staff had raised a number of questions about what happened to families after they were discharged from the agency. This was especially important in view of the findings reported in the literature on the failure of parents and children to maintain what they had been taught in a treatment setting. The evaluator's report notes that frequently the only feedback an agency gets is through obtaining information on families who are doing poorly in the community.

A second concern for staff at the Children's Foundation related to the goals and priorities of the agency. In this progress report the evaluator notes that many of the goals and priorities of the agency needed to be clarified as a result of a number of changes in the agency.

... we felt that the gradual shift in residential care from two years to about six months, created a need for us to re-examine some of the agency's goals and priorities. We thought that a re-assessment and re-defining of goals plus an improvement in the communication around them, would help to establish our own priorities and expectations for decision making. 1.

As a result it is possible to see that staff concerns about agency priorities and goals was an issue in 1977.

Finally, this progress report presents the concept of improving services which the evaluator admits had been raised by some staff members. In this report he indicates that not all staff had discussed the need to improve

services, but that staff were aware of the need to account for what the agency was doing and explore alternative means of achieving these goals in view of the limited resources now available to treatment societies. As a result, the evaluator indicates that his role in the agency is to collect staff ideas and views and develop a program that would enable the agency to answer these particular questions.

As the progress report continues, it describes the use of goal attainment scaling at the agency as a means of identifying goals and recording systematically the achievements that each family makes while at the Children's Foundation. The use of this particular method, the report suggests, provides the Children's Foundation with a means of measuring the goals on a longer term basis. As a result the evaluator concludes that:

The information we collect at follow-up, can tell us a number of things. We are beginning to discuss the difficulties that people have in maintaining what they have been taught, once they leave a treatment program. Our information may or may not support these findings. It will also have the potential of providing us with an insight into some of the pressures that families do experience once they leave us.²

As a result this initial progress report identified three particular issues that staff were dealing with in 1977. Initially they were concerned with obtaining feedback on families after discharge, re-assessing agency goals and priorities and improving services. As a result the evaluator was hired to develop a program which would enable staff to collect this information and answer some of the staff's particular concerns about the program at

Children's Foundation.

On April 4, 1977, the agency evaluator completed a second progress report entitled "Introduction of Program Evaluation to the Children's Foundation". This report is described as a working paper which identifies a number of the issues that staff were dealing with in 1977. Although it was completed only a few days after the initial progress report, this report provides more detail into some of the concerns that staff had at Children's Foundation.

The working paper identifies the agency constitution as a source of support for research at the Children's Foundation. As a result the working paper describes this evaluation project as a "program of research and evaluation". The specific reasons for the evaluation project that this working paper identifies are program development, staff development and accountability.

Under the title of program development, the evaluator identified three stages that the Children's Foundation had developed through over the seventeen years of its operation. It notes that a number of the changes in these philosophies have been as a result of subjective or intuitive impressions in staff. "Seldom has change been based on a careful collection of factual data concerning what the agency was doing".³ As a result the evaluator notes that for any agency to develop it must build into its operations this method of data collection which will enable the agency to make more rational and objective decisions.

Staff development was the second issue identified by the evaluator in 1977. In this progress report he notes that treatment staff must have information about families after discharge. Such information is useful to treatment staff in dealing with families and in reviewing their own attitudes and values.

A third issue that the evaluator identified as a concern of the staff in 1977 was the question of being accountable for the services that the agency provides. This working paper notes that resources are becoming limited and that resources should monitor the way their funds are spent very carefully in order to be able to demonstrate the effectiveness of their services. As a result the evaluator suggests that an improvement in the accountability for the services that the agency provides must be expected in view of the limited dollars available for treatment resources.

In this report the evaluator goes on to describe the purpose of the evaluation project at Children's Foundation. Initially he described the need for information about the maintenance of skills and behaviours after discharge. The follow-up study proposed by the evaluator in 1977 offered the Children's Foundation an opportunity to begin collecting information about families after discharge. Such a program also provided the agency with information about the supports that families need in the community after discharge. This particular information would be particularly useful to the agency in view of the negative findings in the literature on the maintenance and generalization of new behaviours across environments. Once this information is collected, the evaluator argued, it would be possible to make decisions for the program and staff development in improving the services.

In designing the evaluation project for the agency, the evaluator noted that the primary focus of the research project in the agency in 1977 was to develop a measure of follow-up successes. The report notes that measures of process, i.e., who does what in the agency, would also be required for a comprehensive evaluation. However, the framework adopted by this evaluator in 1977 was designed to provide feedback to the agency and staff on agency successes.

This progress report then goes on to describe the process through which agency staff would set goals at discharge and follow-up on these goals six months after discharge occurred. Initially the evaluator was to provide follow-up by re-contacting each family and conducting a final interview with the family once the six months had lapsed. The focus of this follow-up study was to be the goals set at discharge plus a client satisfaction questionnaire. On the basis of these goals it was argued that it would be possible to determine how the family was doing after discharge and how well the family managed to maintain the new skills that the staff at Children's Foundation had taught the family.

To conclude this working paper the agency evaluator provided staff with a series of appendices on the techniques to be used in goal attainment scaling and goal setting with the families. It also provided staff with a description of how to calculate the successes of the agency using the goal attainment scaling methods and how to determine and weigh the scores for each client. While the initial focus of this evaluation project was to implement a method of goal attainment scaling as the means of providing follow-up measures, this research project did not review the concept of

goal attainment scaling since the agency has long since abandoned this technique. Consequently, the balance of this particular paper is of little use to the present research project since goal attainment scaling has not been used at the agency since the inception of this evaluation project. As a result it is possible to see that in this second progress report the agency evaluator has re-identified some of the same issues regarding the need for information after discharge, staff development and learning and program development.

The next progress report that is worth examining was published September 14, 1977. In this report the agency evaluator re-discusses a number of the issues identified by agency staff as important to the evaluation project. In this report the evaluator identifies five questionnaires which were designed to collect the data necessary for this agency to analyze the successes of its treatment program. The first questionnaire was designed to measure the parents' perceptions of their child's behaviour. The second questionnaire was designed to measure the child's self concept. A third questionnaire was designed to measure parenting self concept and a fourth questionnaire was designed to obtain information on parental attitudes towards children. Finally, a fifth questionnaire was developed to present a series of vignettes to parents describing parent/child interactions and asking parents to indicate how they would handle each of the situations described. These five questionnaires provided the initial focus of the agency's evaluation program. The probes or questionnaires described just now were to be administered to the children and the family during the time that the family was resident at Children's Foundation. After each probe or series of questionnaires were completed by the child and his family, the evaluator undertook to feed that

information back to staff as a means of contributing to the understanding of the family and to the planning for the treatment program for the family. Once these probes were completed the evaluator would undertake to complete a follow-up probe six months after the family was discharged from the agency. As a result, these five questionnaires provided the basis for the evaluation project at the Children's Foundation.

By August 9, 1978, the five questionnaires had been reduced to three questionnaires as described by the agency evaluator in an update progress report. The first questionnaire on the parents' perceptions of the child's behaviour remained substantially the same. Questionnaires 3 and 4 were combined and relabelled into Questionnaire 2 which was designed to measure parental problem solving techniques, parents' feelings about parenting and parents' attitudes to children. The fifth questionnaire or series of vignettes was provided to family consultants and Cottage supervisors as a means of providing parent training for the families. The second questionnaire was relabelled to become Questionnaire 3, which was designed to measure the child's feelings about himself, or self concept. These three new questionnaires provided the basis for the current evaluation project at the Children's Foundation.

As a result through the analysis of these series of reports it is possible to see the development of the evaluation project from 1977 to 1978. This development included an initial definition of the goals of the evaluation project and the development of a series of questionnaires or probes for the collection of data on families in treatment. As a result, the evaluation project developed to its present form.

In September, 1978, the evaluator presented another progress report entitled "Introducing Program Evaluation to an Agency: Reflections on a Process". In this particular pamphlet, the evaluator identified a number of major issues and concerns that he dealt with during the development of the evaluation process. As a result it is a useful paper to analyze for later comparison with the results of this research project. The evaluator approached the writing of the report by identifying key steps in the development of the evaluation project.

Initially, the evaluator described the first step in the evaluation process which is the decision to evaluate. In the case of Children's Foundation, the evaluator identified three key issues which encouraged the development of the evaluation program. First, the agency's constitution supports the use of research and ongoing evaluation in the agency. Second, many treatment agencies were feeling particularly vulnerable at the time that the evaluation project was introduced due to cutbacks and closures in the treatment field. Finally, agency staff members expressed a genuine desire to improve the treatment program. These three factors were considered major reasons for the implementation of the evaluation project at Children's Foundation. In addition to the above reasons, the board of directors of the agency and the executive director had decided to allocate resources to support such an evaluation. During this time period, the agency staff discussed the use of an in-house evaluator as opposed to an external evaluator. The evaluator identified the first lesson he learned in the implementation of this evaluation project. He believed that the evaluator must have a system's viewpoint in order to approach the evaluation of any agency. He described the complexity of the decision making process in any

agency and argued that the system's viewpoint helped the evaluator deal with these complexities and develop a viable evaluation program.

The second step that the agency evaluator identified in the process of implementing evaluation is the definition of evaluation. Here, he identified three processes which were important in the development of the evaluation project at Children's Foundation. First, the second step of the evaluation process must provide people a forum to discuss evaluation and their feelings about it. Once this forum has been provided and staff are able to express their concerns or fears about evaluation, it is possible to move to the second phase of this process which is the definition of evaluation for the agency. This includes the development of the details of how the evaluation material is to be used. Finally, the evaluator must consider the third phase in developing the evaluation project which is to assess the readiness of the agency for evaluation.

As a result of this process the evaluator was able to develop and compile a list of staff concerns about evaluation. The major concern that the evaluator identified here was fear that "their job might be unfairly on the line if findings were not positive".⁴ In addition the area that staff identified as most important to them was the fact that the agency lacked a great deal of information about how families do after discharge. As a result the evaluator was able to determine that a follow-up evaluation was the type of evaluation that would be most beneficial to the agency. In addition such an evaluation would enable the agency to use the information in planning its policy. In identifying the type of evaluation that the agency was ready for, the evaluator determined from the article by Frances Ricks, that the

agency was at the initial stage in its readiness for evaluation. As a result the evaluator was able to identify a number of further lessons that were beneficial to him in working with the staff on the development of the evaluation program.

The second lesson that the evaluator learned was that motivation can vary with individuals. Consequently, it is important to be aware of some of the individuals' reasonings for becoming involved in an evaluation project. Unless an evaluator is aware of this, the agency evaluator feels, the evaluation would quickly die.

The third lesson that the evaluator learned was to involve staff early in the process. He argued that the sooner staff are involved the more likely they are to support the evaluation process. If staff are not involved early there is a likelihood that they will adopt a "wait-and-see" attitude towards the evaluation project, if not resist it actively. The evaluator maintained that he believed the wait-and-see attitude was the normal attitude that most staff would adopt in an evaluation study.

The fourth lesson that the evaluator learned in developing the agency's evaluation program was that agency goals are frequently ambiguous and unclear. As a result he concluded that the goals must be established or reviewed early in the process of defining the evaluation study as this would determine the type of evaluation conducted.

A fifth lesson that the evaluator learned in developing the project was to determine how the data is to be used prior to it being collected. He

described a number of staff concerns about the use of data as a means of checking up on staff in the agency. If the evaluator is cautious and determines how the data will be used prior to collecting it, this type of problem will not occur.

A sixth lesson that the evaluator learned was that evaluators are often viewed with suspicion. Both the staff and the administrators in an agency tend to see evaluators as separate from the agency itself. As a result an evaluator may feel isolated in an agency and this isolation is in fact a real position in which many evaluators find themselves.

The third step that the evaluator describes in this particular report is the design of the evaluation itself. He noted in this progress report that the design of the evaluation program is determined by the definition of evaluation. As a result in designing an evaluation it is important to have a clear definition of what evaluation means to the evaluator. There is a danger for some evaluations to be confused with research which in fact services another purpose entirely. The evaluator identified evaluation as a program designed to fit the agency's particular needs for specific answers. On the other hand, research tends to be an experimental project designed to test particular hypotheses with or without consideration for the agency's needs. In addition, a research project often involves random assignment of clients and staff to various test groups and adherence to a strict code of procedures in collecting data. An evaluation, on the other hand, does not involve random assignment of staff or the use of strict procedures. As a result the evaluator concluded that research and evaluation are two different activities which must not be confused during the process

of designing the evaluation.

A second confusion that can arise at the design stage of the development of an evaluation project is the confusion that might occur between evaluation and treatment. An evaluator could quickly become confused about the type of instruments that he should be developing and result in developing forms that collect information on treatment rather than on outcomes. As a result, it is important that the evaluator identify areas of concern that relate to agency and/or treatment goals rather than to treatment processes.

As a result of the process of designing the evaluation project for Children's Foundation, the agency evaluator learned another series of valuable lessons. First he recommends that the evaluator look at the agency information system to avoid a duplication of unnecessary work. Second, the evaluator should keep in mind the agency's needs and not attempt to do more than he can possibly achieve. A further valuable lesson is that the evaluator feels there is no single truth about evaluation and how it should be done. As a result the development of his project reflects a process of adjustment, revision and adaptation for the particular needs of the agency. Finally, the evaluator learned a valuable lesson to not confuse treatment with evaluation in designing forms. The evaluation program is designed to provide feedback on what is currently being done as treatment. Treatment, on the other hand, is the responsibility of the direct service staff. This is one source of confusion mentioned earlier which is important in the design of the evaluation project.

The fourth step that the evaluator at Children's Foundation identifies is the implementation of the evaluation design. This step in the evaluation process involves two processes which are actually doing the evaluation and providing feedback to staff. The evaluator notes that it is important to ensure that staff receive feedback as soon as possible about the evaluation project. In addition, the evaluator at this stage of the project must implement the project to collect the data necessary to provide the feedback. As a result of this process of implementing the evaluation project, the evaluator learned a number of further valuable lessons.

First the evaluator learned that tables and graphs are the best way of providing feedback to staff and administrators. The use of significance testing or statistics is often confusing. A second valuable lesson is that the evaluation data cannot stand on its own and is not the final judge in the decision making process, but merely an aid. A third important lesson is that the use of volunteers and students in the evaluation process has a number of beneficial aspects, including correcting and tabulating data and saving staff time and effort. Finally the evaluator learned that regular channels of communication should be used in implementing an evaluation. If key individuals in the agency are bypassed the evaluation may be dropped or eliminated.

In October, 1978, the evaluator wrote the second report cited in the research questionnaire developed for this research project. As a result, many of the items discussed and reviewed in this past few pages were discussed in the time period between the implementation of the evaluation project and the completion of the October 17, 1978 report to the board of

governors of Children's Foundation. This report identifies the key issues of feedback, accountability and cutbacks that were cited in the questionnaire presented to staff. As a result in reviewing these papers the shift between the initial report on the evaluation project and the report completed in October, 1978 seems slight. However, over this time period the evaluation project developed to a stage that the evaluator was able to name very specifically the concerns that staff had about the evaluation project. As a result by October, 1978, this researcher believed that the evaluator was able to more clearly identify staff concerns and issues about the evaluation project without fear of creating a great deal of staff anxiety about evaluation. As a result the questionnaire developed by this researcher attempted to separate the two time periods of 1977 and 1978 to determine if, in fact, staff feelings about evaluation at these two times did change significantly.

In this report the evaluator describes four benefits that were obtained through the introduction and discussion of ongoing evaluation in the agency. First the introduction of program evaluation to staff allowed staff to be involved in the definition of what evaluation meant to them and the agency. Second, the introduction of program evaluation allowed staff to discuss their concerns as they saw them about evaluation. Third, the introduction of program evaluation to the agency encouraged staff to review agency goals. A final benefit of the introduction of program evaluation was the discussions that occurred about the data collection methods.

The discussion about goals was particularly beneficial to the agency since it revealed at times how ambiguous and unclear the goals were. As a result many staff benefitted through these discussions while learning more about

behavioural philosophy and the treatment goals and priorities of the agency. In addition a number of the agency's goals were re-examined, which was overdue as a result of the shift from long-term to short-term care at the agency.

As a beginning the agency evaluator identified two particular focuses for the evaluation program. First the staff were interested in knowing how families were doing after discharge from the agency. Second, staff wanted to obtain more feedback on how these families were doing as an aid to future case planning with clients. As a result of these staff concerns the evaluator began looking at the information system that existed in the agency to determine what information currently existed that would assist in answering these two staff concerns. As a result the evaluator realized that the agency was collecting nothing systematically that could be used for the evaluation project. Consequently, the evaluator was able to develop a new recording technique that would address the specific needs of the agency and the staff involved. This recording technique involved the development of the three questionnaires which are administered at specific times during the family's involvement at the Children's Foundation. As a result of the introduction of program evaluation to this agency, the agency was able to review its goals and priorities and establish a method for systematic recording of case record data.

Overall these collected papers record the gradual development of the evaluation program at Children's Foundation. Through an analysis of these papers it is possible to see how the evaluation project gradually developed to its present form. As a result of this analysis it is also possible to develop a

greater understanding of some of the dynamics measured by this research project and their implications for other evaluations.

The five variables identified by this researcher in the problem definition section of this project are useful tools for understanding the impact that evaluation has on an agency. Each of these variables describes an area of concern for an evaluator who is attempting to involve staff in an evaluation project. Consequently, it is useful to examine each of these variables individually.

a. Resistance

As hypothesized this research project demonstrates that staff resistance to the introduction of the evaluation project at Children's Foundation varied by occupational group. The conclusions that may be reached from these findings are that each occupational group at an agency being evaluated must be considered in implementing the evaluation project. The results of this research project indicate that the child care staff were less supportive of the evaluation project and therefore felt more threatened by it. Consequently an evaluator, in addressing the question of staff resistance, must consider carefully the impact that the project will have on staff. If the evaluator hopes to involve staff in the project, it is important to consider their views on evaluation.

The literature on loss and change suggests that individuals are resistive to change in their lives. The impact of this resistance to change on evaluation research can be important. It can mean the difference between

a cooperative and involved staff and a resistive and hostile staff. In the case of Children's Foundation, the analysis of the reports by the evaluator during the development of the program indicate that staff certainly raised a number of concerns about the evaluation project. Consequently it is possible to conclude that the results identified by this research project compare favourably with the experiences of the evaluator.

In his progress reports the evaluator frequently identifies staff concerns about loss of job, the impact of the evaluation and the misuse of evaluation to make changes or terminate staff. In addition a number of the reports identified staff's fear about the impact that evaluation would have on their jobs and the agency.

b. Commitment

As hypothesized commitment represents the opposite reaction to resistance and involves staff willingness to participate in the evaluation project. If an evaluator hopes to have staff committed to a project and willing to support it, he must ensure that staff become involved and are involved in the development of the project.

At the Children's Foundation where the evaluator spent a great deal of time involving child care staff in the development of the evaluation project, this research project reveals that their level of commitment to the project was less than that of their supervisors. Consequently commitment is an important concept to consider in developing and implementing an evaluation project. Since the staff are ultimately involved in how the project evolves,

their participation or lack of participation in the project can affect the results. This concept is therefore useful in considering the implementation of any evaluation project. The results of this research project demonstrate that the child care staff were less committed to the evaluation project than their supervisors.

In his research reports, the evaluator does not specifically refer to any occupational groups, but he does identify the issue of involving staff in the evaluation project. In his research report titled "Introducing Program Evaluation to an Agency: Reflections on a Process", the evaluator identified the importance of involving staff early in the process. He indicates that this early involvement will determine whether or not staff "wait-and-see" how the project develops or whether they actively resist the evaluation project. He concludes that early involvement of staff will determine whether or not staff support the evaluation project. This, of course, will affect their commitment to evaluation.

c. Discussion

This research project also demonstrates that staff perceptions about the discussions that occurred at Children's Foundation varied by occupational group. Again, the concept of open discussion is an important consideration for any evaluator who is attempting to encourage staff to discuss issues and contribute towards the development of the evaluation project. An important part of this discussion which the evaluator identifies in his report of September, 1978, is the discussion about how the data is to be used once it is collected. It is at this stage that staff may reveal a

number of their fears about the way data will be used. Consequently the evaluator at the agency concluded that discussion was useful in determining the goals of the evaluation project and in allaying staff fears about the use of the data.

d. Need

The concept of need is another important consideration in the implementation of an evaluation program. This research project demonstrates that staff viewed the need for the evaluation project differently. The occupational status of the staff member apparently affects his view of the evaluation project and its need. This research project demonstrated that the responses of child care staff and supervisory staff about the need for the evaluation project differed significantly. Once again, in his progress reports, the agency evaluator identified a number of staff concerns that were important in determining staff perceptions as to the need for the project. In his very first report to the staff the evaluator identified three specific needs which included information on families after discharge, discussion around goals and priorities of the agency and improving services. These needs specifically seem to have been raised by staff members themselves. As a result in the Children's Foundation staff seemed to perceive the need for the evaluation project. What this research project has identified is that the perception of need may vary from one occupational group to another and that any evaluator must consider the occupational groups in working with the concept of need. In addition, the agency evaluator noted in his report "Introducing Program Evaluation to an Agency: Reflections on a Process", that motivation for evaluation studies varies with individuals. As a result

the awareness of staff as to the need for an evaluation project may also vary. Consequently in developing a program of evaluation for any agency an evaluator must take into consideration the perceived need for the evaluation program from staff.

e. Involvement

This concept contributes to the understanding of the impact that evaluation has on different occupational groups at an agency. This research project has demonstrated that staff perceptions as to the degree to which they were involved in the evaluation project at Children's Foundation varied by occupational group. Once this concept is recognized as important, any evaluator can encourage staff to become involved in the evaluation project.

In working with the agency, the agency evaluator learned another valuable lesson which he recorded in his report "Reflections on a Process". He stated that it was important to involve staff early in the evaluation process if the evaluator wants to have staff support or at least adopt a "wait-and-see" stance vis a vis the evaluation project. Unless the evaluator does so, the agency evaluator believes that staff will actively oppose the introduction of program evaluation. In addition in this same report the evaluator notes that evaluators are often viewed with suspicion by both staff and administrators. As a result staff involvement in the development of the evaluation project can assist in reducing this suspiciousness on the part of staff. A final important consideration in involving staff is that staff can be helpful in designing the evaluation project and determining what specific aspects of the agency need to be evaluated.

f. Time Analysis

Finally the analysis of these five variables over time suggests that the differences in staff perceptions about the evaluation project on each of these five variables does not decrease over time. The occupational grouping of one particular staff member still appears to influence his or her opinions about each of these variables over time. When these conclusions are considered in the light of the literature and the reports prepared by the agency evaluator, their implications to the field of program evaluation are even more significant.

In reviewing the literature reports from the agency evaluator, it appeared that staff involvement and resistance and commitment to the evaluation project reduced over time. The evaluator was able to make more specific statements with regard to the nature of the evaluation program at the agency. As a result this researcher assumed that this more open stance on the part of the evaluator represented his ability to be more forthright with the issues addressing the staff. As a result, this researcher assumed that the reports as they developed over time reflected the ability of the evaluator to name the issues facing the agency more specifically without contributing to excessive paranoia in the staff.

Unfortunately the results in the time analysis presented by this research project do not seem to support this conclusion. It appears that staff occupational categories continue to influence their views of evaluation projects. As a result it does not appear in comparing the two different time periods that staff concerns about the evaluation project reduced.

As noted in the analysis of these particular dynamics, these conclusions are very tentative since this project is both retrospective and attempts to compare staff recollections at two different points in time. In addition, the questions asked staff and used for this comparison are different at each point in time. Consequently, the comparison between these two points in time are comparisons on different questions asked at the same specific time, i.e. the group interviews. However, despite these methodological problems, the assumption that staff attitudes over time would ameliorate and that occupational differences would no longer exist cannot be supported.

g. Issues from the Literature

The vast literature review suggests several important areas that any evaluator must consider in developing and implementing program evaluation. All of these issues must be considered in the light of this research project and its findings on staff differential responses to the introduction of an evaluative program at this agency. Consequently this research project considers some of the major issues raised in the literature review in light of the findings of this research report.

The first question is the use of evaluative findings in the decision making process. The authors reviewed in the literature survey strongly suggest that the question of decision making is an important issue for any evaluation project. Not only should the evaluator consider the decision making process in designing the evaluation project, but he should also consider the needs of the agency personnel or decision makers for data to support decisions. This is important if the evaluator wishes to see the results of his evaluative

study used. If the evaluation project is to be used to make decisions, the impact that these decisions have on staff must also be considered. The authors who describe the use of evaluation for senior level decision making in an agency overlook some of the implications of such decisions to staff working below these decision makers. While Wildavsky describes the ideal self-evaluative organization, this ideal does not yet exist. Consequently the impact that evaluation has on decision making is important for all staff. Wildavsky's review of the ideal organization presents an accurate picture of the type of organization that one might expect where evaluation occurs as a routine. He mentions staff ability to cope with change, the continuous review of agency goals, and the quasi-allegiance of the evaluator who is prepared to abandon the agency and its goals in favour of pursuing more accurate data collection for the decision making process. Such an agency would obviously flourish on change and staff would have to be able to cope with the constant routine of change.

In considering implementing an evaluation study of any agency, the evaluator must therefore be aware of the impact that his evaluation will have on lower echelon staff. This research project suggests that on those variables studied, the views of different occupational categories within an agency differ with respect to an evaluation project. Consequently it is equally obvious that where an evaluation project is aimed at decision making, staff views on the types of decisions to be made will also vary. This will affect all five dimensions studied by this research process.

Where staff feel alienated from the decision making process or the evaluation process, their resistance to or commitment to the evaluative effort will be problematic. The findings of this research study suggest that since different

occupational groups have different views on evaluation, an evaluation process, which is designed to make specific decisions, will undoubtedly generate a great deal of staff anxiety. Staff may be extremely resistive to the evaluative process or may not be willing to commit the time and effort to collecting the data necessary for the evaluation project. Their perceptions as to the need for the project will differ from those of their managers or decision makers. Their sense of their involvement in the evaluation process will also vary. Finally, the ability of staff to discuss the evaluation process will vary. While the evaluator may feel that staff are raising all the issues related to an evaluation project, staff views on this will vary according to their occupational status in the agency. It is therefore not a great leap in logic to assume that the degree to which staff are willing to discuss a project openly will vary according to their occupational category. As a result, the impact that staff can have on an evaluation process is likely as great as the impact that any evaluative study may have on the staff.

Another theme presented in the literature is the process of project design and the formative research process. The material that Leonard Rutman presents suggests a process for designing an evaluation project. The findings of this research project underline the importance of this process and the need to examine the agency not only from all physical and operative aspects but also from the various occupational group views of the agency. An evaluator must not only deal with the stated goals of the agency and his purpose for evaluating, but he must also deal with its latent or unstated goals. Similarly the evaluator must not only consider the supervisory or management views of the agency and its goals, but must also be prepared to review its

goals through the eyes of some of the lower echelon staff. Since these views are different, it is important for the evaluator to consider these divergent views of the agency prior to implementing an evaluation process. Both the results of this research project and the reports prepared by the agency evaluator support and elaborate on this process. Staff must be involved in the evaluation process if the evaluator hopes to obtain staff support for the evaluation.

The findings of this research project also have some implications for Frances Ricks' "chart of readiness". The readiness of staff to evaluate is an important aspect of this particular chart. In this agency there were two sets of clinicians, both of whom were likely at different stages of readiness to evaluate since their views on the evaluation project differed. Consequently, their views on the benefits of the evaluation, motives for evaluation and their involvement in the evaluation process all differed. Similarly, these different views on the implementation of this agency's evaluation process affect the type of evaluative effort possible in an agency. Consequently, in considering the area of clinician readiness or even administrative, political or organizational stability, the evaluator must look at what levels of staff or what occupational groups might be affected by the evaluation process. This is an important consideration in implementing any evaluation project.

As a final conclusion it is possible to state that the impact of evaluation varies according to each occupational group at the agency. This research project has demonstrated that different occupational groups have different feelings and views about evaluation. These views should be considered in

the implementation of any evaluation project in the agency. No matter how positively staff appear to view a change program, it is possible to see that these views differ significantly from one occupational group to another and that these differences can affect the outcome of the evaluation project depending upon how staff respond to the project. As a result, one of the lessons learned by the agency evaluator in this particular case study cannot be understated. "Involve staff early in the process".⁵ This clearly is a cardinal rule for the evaluation of any agency. It is, however, understated since it is important to involve staff from the different occupational groups in order to ensure the success of the evaluative effort.

FOOTNOTESE. Conclusions

1. Doyle Clifton, "A Progress Report". The Children's Foundation, Vancouver, B.C., March 28, 1977, p. 2
2. IBID., p. 7
3. Doyle Clifton, "Introduction of Program Evaluation to the Children's Foundation". The Children's Foundation, Vancouver, B.C., April 4, 1977, p. 2
4. Doyle Clifton, "Introducing Program Evaluation to an Agency: Reflections on a Process". The Children's Foundation, Spetember, 1978, p. 3
5. IBID., p. 4

CHAPTER IV:DATA ANALYSIS OF CASE RECORD MATERIALA. Problem Definition

Chapter I summarizes the work of Michel Hersen and David H. Barlow on single-case experimental designs. These authors provide the second focus of this research project which is the analysis of the data that Children's Foundation have collected as a result of their evaluation project over the last five years. In their book, the authors provide some of the arguments for approaching this data at a single-case level. A further review of single-case experimental designs provides a more complete explanation for the adoption of a single-case approach in the analysis of the data in this research report.

This section of this research project proposes to change the previous data analysis techniques of the evaluation project from a comparative, parametric statistical measure to a single-case, non-parametric measure. This researcher feels that single-case analysis offers the agency more valuable information on their clients than comparative designs do. As a result, this researcher agreed to take the pre-existing data collected by agency staff and formulate a single-case analysis for that data. The analysis of this data is based

on the work of Hersen and Barlow in conjunction with additional theories underlying nonparametric statistics. While these particular areas of data analysis are more fully explored in the literature survey in this part of this research project, it is useful here to summarize a few of the articles that provide the basis for this approach to the Children's Foundation data.

In analyzing the data for Children's Foundation, it is important to recognize that this data represents repeated measures on the same individuals or clients. As a result the single-case approach involves an analysis of repeated-measures on the same clients. The Children's Foundation evaluation project has adopted a repeated-measures design in its data collection approach to evaluation.

Lester C. Shine and Samuel M. Bower provide some of the best arguments for the use of statistical analysis in single-case designs. In their article they indicate that the conflict between single-subject and multisubject research centres around whether or not statistics are useful in single-subject research. They cite a number of authors who have taken opposite sides of this controversy in an attempt to demonstrate the use or inapplicability of statistical analysis in single-subject research. In the view of these authors, the analysis of variance is an acceptable statistical technique for single-subject research. As a result they present a number of the arguments in favour of the use of analysis of variance or ANOVA in single-subject research.

The authors argue that the standard ANOVA test can be used for single-subject design. The only significant difference in this particular approach

to research is that instead of repeated measures on a group of subjects, the researcher is taking repeated measures on a single subject. In single-subject design the only difference is that the repeated measures are being taken on an individual. The authors also note that standard repeated measures' designs allow for the fact that researchers do take repeated measures on the same group of subjects. To allow for the effects of repeated measures the group researcher introduces a random factor which is designed to "absorb any correlation between paired columns of measures on subjects".¹ In other words, in standard group studies the researchers commonly allow for the effects of repeated measures by having a group of samples on which the repeated measures are taken. The assumption is that the effects of repeated measures will vary from subject to subject and that this variance will be averaged out through the group statistical analysis of all subjects.

The authors argue that in their view the single-subject is viewed as a "response generator" in which the responses of the individual "to a particular stimulus are statistically independent and normally distributed about a central response value".² As a result the authors feel that in single-subject research the effects of taking repeated measures may be assumed to be negligible. As a result they go on to discuss four of the major objections to single-subject research and their assumption that repeated measures will not affect a

subject's response.

The authors describe the first objection to this assumption relates to the belief that a subject's possible responses to a treatment may be correlated to his response to the same treatment at a later time. They argue, however, that it is well known that any subject's response to a stimulus situation will vary at random around "a central response value".³ This variation may be due to different psychological variables, perceptual differences or physiological variables. For a single-subject, thus, similar effects may occur at random over time. It is therefore reasonable to assume that the effects of repeated measures on a single-subject can be equated to the effects of repeated measures on any group of subjects which will average out over time.

The second and third objections to the assumptions that a single-subject's response to stimuli are independent relate to the belief that there may be a correlation between the columns of data or rows of data under one treatment and those same columns or rows under a second treatment. Once again the authors argue that when one assumes that the individual's responses are statistically independent it is possible to demonstrate that the independence of these responses will not affect the significance of the outcomes under repeated measures.

Finally the authors review the objection that there may be an interaction between treatments and trials. The authors note that the learning process is a sequential process and that the response values under one treatment condition cannot be equated to the exact response values under a similar

but second treatment period. The authors state that it is possible to counter the effects of this learning process through the introduction of an "error term". This error term will allow for the effects of repeated measures on individuals. The authors note that "the main effects for trials change slowly from one trial to the next".⁴ To account for this slow change it is possible to introduce "a modified error term for testing effects".⁵

As a result of their arguments the authors feel that the use of single-subject design is an appropriate experimental technique. The problems encountered by single-subject design are similar to problems encountered in group designs where repeated measures are taken on the same subjects. It is possible, the authors feel, to demonstrate that single-subject design can provide valuable information on the effects of treatment.

Donald T. Campbell and Julian C. Stanley provide the concept of time series experiments. They define time series designs as designs where periodic measurements of a group or an individual are taken. During these measures or observation periods experimental treatment is administered which results in a differentiation between the measurements taken before and after the introduction of this treatment.

As indicated earlier the Children's Foundation is not using a true time series design but is using the repeated measurement techniques. As a result, what Campbell and Stanley have to say about time series designs is useful in addressing some of the problems that repeated-measures designs face. Consequently it is worth reviewing these particular arguments

keeping in mind that Children's Foundation is not using a true time-series design.

The authors note that the experimental design typified by the time-series experiment was the basis of much early experimental exploration in the physical sciences and in biology in the early nineteenth century. Scientists tended to note changes in the weights of objects or in the behaviours of subjects after the introduction of an experimental technique. As a result of the introduction of the experimental technique scientists observed changes in the subject being studied. In these circumstances the researcher would make a supposition about the effect of the experimental technique on the subject.

In their article Campbell and Stanley address some of the factors affecting the validity of this particular type of experimental design. They note that one of the problems of the time-series experiment is that it is impossible to control for the effects of history on the subjects being studied. In other words, changes that are observed before and after the introduction of the experimental technique could equally be claimed to be the results of events that have occurred in the normal life cycle of the subject. This change-producing event occurred between the observation before the introduction of the experimental technique and the observation after the experimental technique. In other words, one of the problems of the internal validity of this type of research study is that the changes could in fact be as a result of events outside the experimental design.

In Children's Foundation, history is an important consideration in determining the effectiveness of the program at Children's Foundation. Since the

child has continuous contact with his family on weekends and through family sessions it is important to consider any changes in the family that may occur between the probes administered at the Foundation. For example, in some cases the family is reconstituted between the time that the initial probes are completed and the time that subsequent or final probes are completed. In a number of cases parents have separated or re-coupled during the time period that the child and family are receiving treatment from the Children's Foundation. These represent significant changes in the family's life history and obviously will affect the child's behaviour in the family. Consequently it is important to consider the effects of history on a child's behaviour at the Children's Foundation.

History is a threat to the validity of inferences that can be made about causal effects. However, in view of the chronicity of the problem being experienced by the subjects in this study it is most implausible that a sudden run of good luck would happen to coincide with the period of treatment. Consequently it is possible to conclude that changes observed in the clients are not due to history effects. Therefore most, if not all side effects can be considered part of the treatment variable.

A second interference with the time-series design is the effect of maturation that occurs during the periodic measurements of the individual or the group. As a result of the simple process of maturing or growing more adult-like or independent, the conclusions that are reached in time-series designs are equally subject to distortion. The only counter balancing argument against the use of maturation as an alternative explanation for changes in behaviour is that it is not a smooth and regular process.

Consequently, a sudden change in behaviour as a result of maturation could occur at any point during the time-series design. Therefore it could occur equally as frequently before the introduction of any experimental treatment as it could after or during the introduction of the experimental treatment. As a result the effects of maturation on a time-series design can be minimized to the extent that one would expect it to occur by chance at any point during the time-series experiment.

Once again, the effects of maturation on a child's behaviour could be significant. The degree to which a child's behaviour changes through the simple maturation process may be significant. As a result, in considering the results from the Children's Foundation care has to be taken to consider the effects that maturation may have on the child's behaviour, both at home and at Children's Foundation.

Another threat to the internal validity of such an experiment is the effect of testing on the subjects. However, the authors note that one would expect testing to affect the subjects at each of the observational periods if the subject is aware that observation is occurring. In this case, however, testing is part of the assessment and treatment of the family. It is intended to provide an opportunity for stocktaking which will likely show improvements. Instrumentation, on the other hand, refers to changes in the method of measuring, observing or scoring a particular individual's response to an experimental treatment. These changes in scores or measurements may be confused with natural changes in behaviour. Thus, if a researcher is not careful in ensuring that testing and instrumentation threats are removed from the experimental design, it is possible to confuse the effects of these

two variables with the actual effects of the experimental treatment.

These two procedures represent significant threats to the validity of the Children's Foundation results. First, the question of the effects of repeated testing on the results of those tests is a primary concern. Since the parents and the child continue to complete the same test instruments there is a question as to the effects of repeated testing on the outcomes of those tests. Although the tests are completed several months apart and in some cases perhaps as much as a year apart, the question as to the effects of repeated testing on the results is still insignificant. Since the probes that parents complete are the only sources of data currently used by the Children's Foundation in their evaluation project, the reliability of these results is a serious question. Consequently, it is important for Children's Foundation to be able to address to some degree the effects of repeated testing or test outcomes.

A further threat to the internal validity of such a design is what the authors refer to as regression effects. By regression effects the authors refer to situations where the particular client or study group has been selected on the basis of its extreme scores in one particular area of functioning. As a result it might be expected that these extreme scores would regress or change simply as a result of time lapse. Again at Children's Foundation statistical regression may be a serious concern for the evaluation project. Certainly the children who are admitted to Children's Foundation are selected on the basis of extreme behaviours. As a result there may be a tendency for these children or their families to demonstrate some degree of statistical regression or amelioration of their

extreme behaviour towards more normal and acceptable behaviour. This may be a more difficult area for Children's Foundation to address in the evaluation project.

Finally, the chances that individuals may drop out or self-select out of a time-series design can be minimized by ensuring that the study group is based on single members of the group. Thus, the mortality rate would not affect the outcome since the outcomes would not be listed as products of the overall group. If the researcher attempts to provide an overall measurement of a group's response to a particular experimental design, then absenteeism, quitting or replacement of missing subjects by new subjects will definitely affect the overall outcome of the research project. It could be expected that those who do disappear during the process of a time-series design could be expressing negative reactions to the experimental treatment or might be withdrawing as a result of other factors unrelated to the experimental treatment. However, it is important under these circumstances where group comparisons are being attempted to note why individuals withdraw as this may be a direct reflection on the experimental treatment itself. A researcher may obtain results that reflect positively on a program while in fact the people who really require the particular treatment have withdrawn from the program. When a researcher considers the individuals who stay in the program and those who withdraw, the true effectiveness of the program may become more apparent and may appear less effective.

Again, the effects of experimental mortality are important for Children's Foundation. A number of clients fail to complete the probes or withdraw from treatment prior to the treatment contract being completed. These

individuals have not been studied by the Children's Foundation since data is not available on them. Consequently, it is important to consider what patterns of withdrawal emerge since this will reflect the true effectiveness of the program.

Campbell and Stanley review some of the threats to the external validity of a research project. Again, the external validity of any research project reflects the ability of a researcher to generalize his findings from one group to the population as a whole. While the Children's Foundation evaluation project is not attempting to make generalized statements about the implications of its findings from its evaluation project to any other population, it is important to consider some of the factors that the authors identify since it will affect any descriptive comparisons that may be drawn between different units at Children's Foundation or between single and two-parent families. The authors claim that if the researcher is hoping to use a time-series design then the researcher must specify in advance the relationship he expects to find between the introduction of the experimental variable and the manifestation of some effect or reaction to this variable. Thus, if the experimenter feels that a delay in response to the experimental treatment will occur, then it is important to specify this in advance of the treatment. Otherwise, it will be impossible to generalize the effects of the treatment without being aware of the fact that the response time will be delayed. If the researcher is not able to specify this in advance then a particularly effective treatment might be disregarded simply because the researcher is unaware that there will be this delay in response time. He may erroneously conclude on the basis of no response that the experimental treatment is ineffective.

The first threat to external validity which is a concern for Children's Foundation Campbell and Stanley refer to as the reactive or interaction effect of testing. The authors are referring to the tendency of pre-tests to increase or decrease an individual's sensitivity to an experimental treatment. The individual learns what appropriate answers may be required on the questionnaires. In this situation the observed differences between the pre-test and subsequent tests may be as a result of the individual's reactive effects to testing.

Again, this reactive effect is important to the Children's Foundation evaluation project since the same instruments are used on three or four different occasions. While this particular research project is not attempting to make comparisons between the results of Children's Foundation and any other organization, it is important to consider the reactive effects of repeated testing since the same instruments are used a number of times by the Foundation. In addition, the Children's Foundation may have been interested in originally designing the evaluation project in a statistical comparison between the effectiveness of their program and other programs. If, in fact, the threat of closure motivated the Children's Foundation to introduce evaluation to demonstrate the effectiveness of its program, then the impact of any threats to external validity is to reduce the apparent effectiveness of the program. By failing to control for the threats to external validity, the ability of the agency evaluator to generalize his findings to other agencies or make comparisons between the findings of the evaluation project and the results of other agencies is limited.

A second threat to external validity which is important to the Children's Foundation is the effect of multiple-treatment interference. This particular issue is problematic for single-case and repeated measurement designs. The question is what effect prior treatment has on the individual. However, there is also a concern about the effect of previous treatments that the family or the child may have received from other agencies prior to coming to Children's Foundation. The effects of these treatments may not be erasable and the impact that previous therapists had on the family or family functioning may determine the degree to which the family appears to improve or not improve in treatment at the Children's Foundation. It is indeed possible that the children that arrive at Children's Foundation are in fact the 'last chance' children or families. In other words, these families may have been offered all alternatives that seem feasibly possible and Children's Foundation may be the last stop in a search for appropriate services. This has implications for the eventual outcomes of treatment. If, in fact, the Children's Foundation is dealing with children who have failed at many other treatment programs, then it may be expected that the results that Children's Foundation obtains may be low simply because of the nature of the difficult population that the Foundation works with. In this particular case it may not be surprising to find a low success rate in the families with which the Foundation works. In addition, the family may also be receiving other treatments outside what is happening at the Children's Foundation through regular contact with their own social worker, for example. Once again, the treatment that the family receives through other sources may confuse the treatment goals that the Foundation is working towards. As a result it is important to consider what the effects of prior treatment are.

The importance of these items to the internal and external validity of any research program are numerous. The failure to control for these variables creates problems for a researcher in claiming that the changes in behaviour are as a direct result of the treatment that the family receives. Secondly, a researcher will not be able to state categorically that the same treatment will produce similar results in another population. Unless a researcher makes every effort to control for these particular threats, his ability to make general statements about the effectiveness of his treatment and how it can be applied in other situations is seriously limited.

Another area of concern is the instrumentation effects. This is perhaps the more serious of the two procedures involved in the administration of tests since the instrumentation of the test can easily change from one probe to the other. Perhaps the most significant concern is the manner in which the questionnaires are completed at each probe. Since the same family counsellor may or may not be conducting the completion of the questionnaires there is a serious concern over the manner in which these questionnaires are explained to parents and in which parents complete these questionnaires. Since the questionnaires are completed at such extensive time intervals there is a distinct possibility that the original family counsellor may have resigned and moved on to a new job, so that subsequent probes are being conducted by a different family counsellor. In addition, the probes are completed in different environments and as a result under different environmental influences, i.e. at the agency or at home, supervised by a family counsellor and unsupervised. Consequently, the question of instrumentation is a serious concern in the interpretation of the results that the Children's Foundation obtains from the completion of these probes.

Another threat to the internal validity of any study is statistical regression. Campbell and Stanley describe statistical regression as a situation in which groups who are studied are selected for study on the basis of their extreme scores in one particular area of behaviour. As a result of their extreme scores there may be a tendency for this type of individual to regress towards more normal behaviour. This change in behaviour can then be confused with the effects of the experimental treatment.

The time-series design presents particular problems for tests of significance. The authors note that generally tests of significance assume that there is little or no relationship between the various measurement points in an experiment. However, the trouble with time-series designs is that it is not possible to assert that the observational periods or measurements taken between observations are independent measurements.

The authors address the question raised by Shine and Bower earlier. The problem of independence in statistical tests is a problem for researchers who use time-series designs or who are making repeated measures. As indicated earlier, however, Shine and Bower feel that the measurements taken on a group or an individual are allowed for in the analysis and therefore statistical tests are available for assessing the significance of the research findings. The dependence of data in repeated measures is allowed for in calculating error variance. In the view of Shine and Bower even non-parametric statistics are not necessarily required techniques since they still argue that the observations obtained through a repeated measures or time-series design can be assumed to be independent of each other and that there are means of building in ways of accommodating for any correlation

that might exist between the observation periods.

The problem addressed by this researcher in the plan of analysis of this research project was to develop a statistical test for the analysis of the data collected by Children's Foundation. The resolution of this problem involved consideration of the type of experimental design that the Children's Foundation evaluation project assumed. By viewing it as a repeated measures design in which measurements were taken at four different times during the treatment process, this researcher was able to resolve the problem of which statistical test to use. The Children's Foundation takes measurements at intake, transfer to Access, at discharge and six months after discharge, or the follow-up measure. This research technique looks suspiciously like a time-series design, but it is in fact a repeated measures design. The Children's Foundation has made no attempt to provide control or non-treated groups for comparison. Consequently, the data they are collecting represents a series of observations on the same group of individuals or the same individual. This is a repeated measures design with all its inherent problems of establishing significance of the measures of change that are obtained. As a result the repeated measures design faces many of the same problems as the time-series design described by Campbell and Stanley.

To resolve the question of which statistical test to use in the analysis of the Children's Foundation data, this researcher decided to opt for a non-parametric test of significance. Robert Johnson provided some support for this decision in his brief description of the characteristics of non-parametric statistical tests. He described non-parametric tests as tests that are generally known as "distribution free tests".⁶ Johnson notes that non-parametric

statistics, as opposed to parametric statistics, do not make assumptions about the distribution of the parent population. On the other hand, parametric tests tend to rely on assumptions about the parent population and its distribution across the normal curve or around a central limit. Non-parametric tests, on the other hand, make fewer assumptions about the distribution of the sample population and do not depend as much upon the concept of parent population distribution.

Most of the statistical procedures that we have studied in this book are known as parametric methods. For a statistical procedure to be parametric, we either assume that the parent population was at least approximately normally distributed or we relied on the Central Limit Theorem to give us a normal approximation.⁷

Since non-parametric tests place fewer restrictions on the type of material required to make judgments about a population, these types of tests are better used with the Children's Foundation data where it is not possible to make any assumptions about the nature of the distribution of this population. Non-parametric tests have the additional benefits of being easier to apply in providing analyses of the sample population. Despite these differences, Johnson notes that non-parametric statistical tests are only slightly less efficient than the more routine parametric tests. Consequently, this researcher opted for non-parametric statistical analysis since it did not require any assumptions about the nature of the population being studied or about the nature of the population's distribution around the variables being studied. Non-parametric methods seem to offer the greatest opportunity of achieving accurate results from the data collected by the Children's Foundation.

FOOTNOTESCHAPTER IVA. Problem Definition

1. Lester C. Shine and Daniel M. Bower, "A One-Way Analysis of Variance for Single-Subject Designs". Educational and Psychological Measurement, Volume 31, 1971, p. 106
2. IBID., p. 107
3. IBID., p. 108
4. IBID., p. 110
5. IBID., p. 113
6. Robert R. Johnson, Elementary Statistics. Duxbury Press, Massachusetts, 1976, p. 513
7. IBID., p. 514

B. Plan of Analysis of Case Record Data

As part of the evaluation project at Children's Foundation, the agency evaluator developed a series of questionnaires to be administered to the children and their parents involved in the Children's Foundation program. The purpose of these questionnaires was obvious. For any evaluation to be done, it was necessary to take some measurements. Since the initial thrust of the evaluation attempted to analyze the outcome and the effectiveness of the program, it was obvious that measurements of the problems that families face when they come to Children's Foundation were necessary. Consequently the agency evaluator developed three questionnaires which families complete. These questionnaires provide the basic data for measurement of change in families and for the measurement of the effectiveness of the program at Children's Foundation.

The initial concern of the staff at Children's Foundation was to obtain information on how families were doing after discharge from the Foundation. Consequently the questionnaires were designed to obtain information on how

families were doing after discharge. The agency evaluator quickly recognized that in order to measure change in families it was also necessary to take measurements on families when they first arrived at the agency. This provided a measurement against which to make comparisons from future measurements. As a result, the agency evaluator decided to administer the questionnaires to families four times during their involvement with the Foundation and after the child's discharge. Each questionnaire is referred to as a probe and is designed to measure a variety of behaviours and attitudes that parents and children have about themselves when they come to the Foundation. These questionnaires are subsequently used to demonstrate progress that families have made during treatment, and to measure the degree to which families are able to maintain their improved or changed behaviour patterns after discharge.

The questionnaires are administered at three specific occasions during the time that the family and child are directly involved with the Children's Foundation. First, the family is asked to complete a questionnaire at intake. This measurement provides the Foundation with baseline measures as to the specific problems that the family sees in the child. Subsequent measures are taken some months later when the child is transferred to the Access program. Finally, a third probe or series of questionnaires is administered at discharge. These three series of probes provide the Foundation with the measurement of progress that the family has made during the time that it is working with the Children's Foundation. These probes should demonstrate significant

improvement in the child's behaviour from the time that the child and family are seen at intake to the time that the child and family are seen at discharge.

In addition a fourth probe is mailed to the family six months after the child has been discharged from the Foundation. The purpose of this probe is to measure the degree to which families are able to maintain their new problem solving behaviours after discharge. In addition to the fourth probe is a client satisfaction questionnaire which is mailed with the three original questionnaires. The obvious purpose of this questionnaire is to see to what degree families were satisfied with the services at the Foundation.

The first questionnaire is composed of a series of twelve statements relating to the child's particular behaviour. The parents are asked to respond to statements about the child's behaviour and rate the behaviour on a scale of one to five. The scale represents the degree to which the child demonstrates a particular problem. It runs from "all the time" to "never". Parents are asked to rate the frequency with which a child demonstrates a particular problem behaviour on this scale.

The construction of the questionnaire involves an initial positive statement in which the parents are able to indicate whether or not the child behaves in an acceptable manner. Where the child behaves in an acceptable manner, the parents are not required to complete any of the balance of the questions. Hence, the problematic parts of the questions are omitted

since the child does not demonstrate any problematic behaviour. Where the child does not behave in an acceptable manner, the parents are presented with a series of problematic behaviours which they are asked to rate on the same scale. As a result, when the child does not do as he is told, the parents can rate the specific behaviours that their child demonstrates. The questionnaire provides the Foundation with a measure of the child's problem behaviour. Over time, the questionnaire should reflect a change in the child's behaviour seen through the parents' perspective as the child and family go through the treatment process.

The second questionnaire is designed to measure the parents' feelings and attitudes to parenting. The twenty-four items on the questionnaire are rated from "completely true" to "never true". Parents are asked to respond to a series of statements and rate them on this scale of one to five. The twenty-four behaviours then compress into three specific parental attitudes or feelings about parenting. This questionnaire is designed to measure the parents' problem solving techniques, their attitudes to parenting and their attitudes about children. Through the treatment process, meetings and discussions with the parents these attitudes should reflect a movement from negative perspectives of parenting and children to more positive attitudes.

Finally, the child is asked to complete a questionnaire about himself. This third questionnaire is a simple yes/no scale, in which the child is asked to respond to twenty specific statements indicating the way he feels about himself. The scale provides Children's Foundation with

information about the child's self-esteem and perception of self. The twenty items attempt to measure five specific variables which include school, happiness, family, popularity and competence. These specific scales should reflect improvement over time as the child and family work with staff at Children's Foundation.

These three questionnaires form the basis of the evaluation project at Children's Foundation. As parents and children complete these scales during the treatment process, it is possible to trace improvements in behaviour and attitudes. The subsequent measure obtained six months after the family and child are discharged from Children's Foundation provides information about the degree to which parents and children are able to maintain their new behaviours after discharge.

The fourth scale, the client satisfaction scale, is designed to measure parents' perceptions of the services they received at Children's Foundation. The client satisfaction questionnaire provides the agency with information about its ability to share with the parents information about the program at Children's Foundation. In addition, it gives the staff at the Foundation some feedback on the method with which services are provided to families at the Foundation. Finally, the questionnaire also provides the Foundation with information about the child's behaviour after discharge.

Since your involvement with the Children's Foundation, how do you view your child's behaviour at home?₁

This question, for example, allows the parent to indicate whether or not their child's behaviour has improved or worsened since contact with the agency.

These questionnaires represent the basis of the data collection for the evaluation project at Children's Foundation. This research report analyzes this data. The analysis of these questionnaires involves a Friedman two-way analysis of variance by ranks. This particular nonparametric test provides a way of testing the hypotheses of change over time. The Friedman test involves matching the subjects of the study under a variety of conditions. In this particular evaluation project, the same subjects are studied and matched according to variables generated by the agency evaluator at the Children's Foundation. For example, the parents are compared at four separate points in time across the same variable pertaining to parenting. The subjects remain the same while the different conditions involve the length of time that the parents and the child are exposed to parent training and behaviour modification techniques at the Foundation. As a result the data analysis demonstrates that parents' response to parenting questions change over time and that these changes represent a significant improvement in parental attitudes.

The statistical data analysis techniques determine whether the results obtained may be attributed solely to chance or whether, in fact, the results reflect the operation of some other factors in determining the outcomes. The statistical tests used by this researcher indicate whether the change that has occurred is substantial enough to be greater than what could be explained by chance alone.

The Friedman test helps determine whether the changes that are observed in parent and child responses to the questionnaires at four points in time are a result of chance or a result of some other factors operating either at the agency or outside the agency.

TABLE 1

FRIEDMAN ANALYSIS OF VARIANCE BY RANKS

MOTHER	SCORE 1	RANK 1	SCORE 2	RANK 2	SCORE 3	RANK 3	SCORE 4	RANK 4
PROBLEM	6 32 26	2	6 33 27	3	6 31 25	1		
FEELINGS	9 47 38	3	8 42 34	1	7 44 37	2		
ATTITUDES	7 42 35	2.5	7 42 35	2.5	5 36 31	1		
SUM OF RANKS		7.5		6.5		4		

The above table provides a sample of the type of analysis involved in using the Friedman test. The Friedman test involves ranking four separate scores that the parents and children obtain when they complete the questionnaires at each probe. This ranking process provides a system of establishing change over time. The number of ranks available represents the number of times that measures are taken. In this particular study at Children's Foundation, three or four ranks are possible depending on the number of probes available on each family.

In the table which is presented three ranks are possible since this particular family obviously completed three probes - one at intake, one at transfer to Access, and one at discharge. The table presents the mother's responses to three particular variables - problem solving, her feelings about parenting and her attitudes to parenting. The scores of each test are located on the left-hand side of the vertical dotted line while the rank is provided on the right-hand side of the same vertical line. In this example case the particular parent achieved a score of 32 at the first probe, 33 on the second probe and 31 on the final probe, on the variable of problem solving. The ranks for these probes are 2, 3 and 1 respectively. As a result it is possible to see that this parent received different scores for each of the other variables relating to her feelings about parenting and her attitudes towards parenting and the ranks for these scores vary accordingly.

The first step in the use of the Friedman test, thus, is to total the scores for each of the questions in the questionnaires. These score totals can then be ranked in order of smallest to largest. If the conditions affecting the scores are operating totally by chance, then the distribution of ranks should be equal. If, however, some other factors are affecting the scores, the ranks should not be equally distributed.

In the particular sample provided it is possible to see that the sum of ranks at the bottom of this table demonstrate that the ranks are not evenly distributed. In fact this particular parent received higher scores for the sum of ranks on the first probes and the lowest on the final series of probes. As a result it is possible to observe that this particular

parent's responses to the probes varied over time. The Friedman test can now be used to determine whether the difference between the sum of ranks at probe one and the sum of ranks at probes two and three are large enough to indicate a significant difference in her responses to the questions on problem solving, attitudes to parenting and feelings about parenting.

The steps in computing the Friedman test are quite simple. First, for each probe the responses of the parents must be totalled on each variable that has been measured. For example, in questionnaire one, question 1, the parents are asked to respond to the statement "child does as told when directed to do something". When the child does not do as he is told, the parents are able to specify a number of problematic behaviours and the degree to which the child demonstrates these behaviours when disobeying. For this first question, then, the sum of the parents' response represents the score for question 1. The same score is computed for the second, third and fourth probes. As a result the researcher will obtain four scores for the child's response to directions at four different times during his involvement with the agency. These scores can then be ranked 1, 2, 3, 4, moving from the lowest score to the highest score. The ranks represent the movement of the child from a very low score in the parents' perception to a high score and indicates an improvement in behaviour. For each questionnaire, the behaviours that the child demonstrates are scored and then ranked accordingly. As a result, one expects that the totals of the scores down each column for each probe would be approximately equally distributed if chance alone were operating. If, however, some other factor is affecting the scores then one expects the scores to be unequally

distributed and hence the ranks to be unequally distributed.

In the case of the table presented which in fact reflects the data collected from the second questionnaire, it is possible to see that the ranks are unevenly distributed. In summing the ranks down each column the sum of ranks for the mother's scores at times 1, 2 and 3 or probes 1, 2 and 3 are 7.5, 6.5, and 4 respectively. Thus, it is possible to conclude that chance alone cannot be operating in this particular case since the ranks are unequally distributed.

In analyzing the data for Children's Foundation, this research project divides the data into five separate analyses. First, all the problematic behaviours are divided according to the parent responding to the questionnaire. For example, the father and his responses to the twelve problematic behaviour areas on questionnaire one are analyzed separately from those of the mother. Similarly, the father's responses to the questionnaire about feelings on parenting are analyzed separately from the mother's. This represents a total of four separate analyses. Finally, the child's behaviour is analyzed separately from both parents.

This results in five different Friedman tests for each of the families involved at the Children's Foundation. The first test measures the father's perceptions of change over time in the child's behaviour. The second test performs a similar analysis for the mother. The third Friedman test measures the father's change in his attitudes about parenting over time and the fourth measures the mother's changes. The final Friedman test measures the change in the child's response to his self-perception

over time. As a result, this researcher developed a Data Record Sheet on which the varying scores for each parent and child are recorded. (Appendix 8).

This Record Sheet is used in the computation of the sum of ranks for each family's response to the probes. The sum of ranks on this Data Record Sheet reflect or should reflect a progressive improvement or increase in the size of the sum of ranks over time. For instance, in table 1 the sum of ranks does not increase over time, but decreases. Consequently it identifies an apparent decline in the parent's feelings about parenting over time. In normal situations, however, the sum should increase for each subsequent probe which would indicate that the scores on each probe improve over time. If, on the other hand, conditions are operating totally by chance, the sum down each column on the Data Record Sheet would be approximately equal for each probe. This indicates that the likelihood of the parent responding in a positive way or negative way to any one of the questions asked at each probe is approximately equal. Consequently, it is possible to conclude that changes in the parent's attitudes about parenting or in the parent's measure of the child's behaviour are occurring solely by chance. In other words, the parent is just as likely to say that the child has improved when in fact he has not as it is for the parent to say that the child has not improved when in fact the child's behaviour has demonstrated an improvement.

This process raises the question of significance testing in research. The purpose of significance testing is to demonstrate that the results obtained by any statistical test are not likely to be obtained by chance

alone. In other words, the statistical test demonstrates that chance alone will not produce the same results that are obtained by the test. Once this is done a researcher is able to conclude that some other factors may be affecting the outcome results of the test. In addition it is possible that significance may arise from large differences in which no steady trend is apparent. It is therefore important to use statistical tests to check the data for the significance of such variations in the data. For example, with the Children's Foundation it is possible to conclude that treatment that families receive at Children's Foundation contributes to a more positive attitude of the parents on parenting. If the significance test does not rule out chance as the contributing factor to the change in scores on each of the probes, then it is impossible to say whether or not the change in parental attitudes is as a result of the program at Children's Foundation or as a result of other unaccounted for factors, such as chance.

On the Data Record Sheet, the rows across represent the various conditions on which the subjects are measured. For example, in the case of the male parent, the Data Record Sheet provides his responses to the question of the child's willingness to comply with directions at three or four separate points in time. On the Data Record Sheet, score 1 represents the measure of the father's perceptions or male parent's perceptions of the child's behaviour at intake. Score 2 provides the same individual's response to the same question about the child's willingness to comply with directions at the point at which the child is being transferred from the regular program at the Foundation to the Access program. Score 3 provides the same measure at discharge and the fourth score, where it is available,

represents the measure of the same variables six months after the child has been discharged from the Children's Foundation.

The differences between the scores from probes 1, 2, 3 and 4 should reflect either improvement or deterioration in the child's willingness to comply with directions from his father. Over time these scores ideally should improve. Hence, if the program at Children's Foundation is effective, one expects the scores or the ranks for each score to increase for each probe. At intake, the scores for the child's behaviour or willingness to comply should be low and six months after discharge that same child's willingness should reflect improvement. Consequently, in looking across the Data Record Sheet one expects the father's score to be ranked highest at the six month follow up or on the last available probe. As a result in looking at the Data Record Sheet, the scores obtained by each parent and child should increase from left to right across the variables measured. This process of ranking the scores for each probe provides a system of establishing change over time.

In the example provided it is possible to note that in fact the scores decline over time as the parents answer the probe about their feelings on parenting. In this case it is significant to observe the downward trend of this particular parent and her feelings about parenting. As a result this reveals important information about this particular parent.

At this point it is possible to see the significance of earlier arguments about the single-case approach to research. Each case at the Children's Foundation is treated separately and analyzed separately. Each case

generates its own data and, through the use of the Friedman test, demonstrates improvement of the child or family over time. As a result each family seen by the Children's Foundation becomes its own separate experiment which generates information for the Foundation with regards to the effectiveness of the program at the agency. Each family becomes the subject of an individual study and each family has its own series of statistical significance testing to determine whether the scores obtained in completing the questionnaires represent significant improvement or change in behaviour over time.

The Friedman test is quite simple. The three or four scores obtained by the parent or child in completing the questionnaires are ranked across time. As indicated in the example provided, the parent's scores on her feelings about parenting are assigned a rank across time. The ranks are then summed down each column so that it is possible to obtain a total score of the ranks at each point in time. Consequently, the totals down the columns represent the distribution of ranks over time. The next step is to use Friedman's statistical test which determines whether or not the ranked totals differ sufficiently to enable the researcher to assert that these differences cannot be accounted for by chance alone. The Friedman test, thus, provides a statistical means of asserting that the sum of ranks down each column cannot be accounted for by chance alone, but must be considered to be as a result of some treatment or other condition applied to the family during their involvement with the Foundation.

The analysis of the data on a case by case basis provides the Foundation with a vast quantity of information about their clients and about the

change in their clients' behaviour across time. If the outcomes are negative, the data analysis provides the Foundation with feedback about their program or possibly about the scales or probes that they are using to measure change. Should the analysis of the data collected by Children's Foundation not show significant changes across time, it may reflect two things. First, it may reflect that the Foundation's treatment program is not successfully changing behaviour in families and that changes are occurring by chance alone. Second, it may demonstrate that the instruments currently used by the Foundation are not fine enough to pick up changes in behaviour or attitudes in the family. The analysis of this data allows the Foundation the first opportunity to determine exactly what is happening for families who come through the Foundation for help.

The sample selected for analysis in this part of this research project includes all families on whom at least three probes are available. This researcher felt that at least three probes in time were necessary to provide an adequate picture of what is happening in families in treatment at the Foundation. This researcher developed a total sample of thirty-eight cases from the Foundation. Fifteen of these cases come from Cottage 1, thirteen cases from Cottage 2 and a further ten from Cottage 3. Out of these thirty-eight cases, eleven were judged to be valid cases where two parents were in the home and had completed all the required questionnaires and probes. In addition, thirteen cases involving one parent only have sufficient data for analysis. The balance of the cases had data missing or incomplete data. These cases are analyzed to provide additional information on the outcomes of the evaluation project. As a result, the data analysis part of this research project has a total

of twenty-four valid cases on which either three or four measures are available. Another fourteen cases are analyzed where the data might shed additional light on what is happening for families at the Foundation.

In addition the data are analyzed and described descriptively by unit. Since each unit functions slightly differently in terms of the staffing and location, it is beneficial to describe the data by Cottage or unit. This descriptive analysis of the data provides some information about the outcomes of specific Cottages at Children's Foundation. Finally, the data are also analyzed by one-parent or two-parent dimensions to provide some statistics on the perceptions of one-parent and two-parent families on behaviour changes in their child through work at the Foundation.

FOOTNOTESB. Plan of Analysis of Case Record Data

1. The Children's Foundation, "Client Satisfaction Form". The Children's Foundation, Vancouver, B.C., 1977, p. 1

C. Literature Review for Case Record Material

This literature review provides background support for the single-case level of analysis of the Children's Foundation data. A number of the arguments that Hersen and Barlow present in defence of single-case studies are important to the data analysis adopted for Children's Foundation data. The rationale that the authors present in supporting single-case experimental designs are presented as supporting arguments for the type of data analysis that this research project adopted.

Single-case experimental designs are research designs that can be used for exploring human behaviour. As a type of research design, single-case experimental research suggests an alternative approach to the study of human behaviour. This approach differs from the routine experimental design that the natural sciences have adapted for research. It is important to review single-case experimental design to see what advantages it offers the researcher and the practitioner in the human service field and to demonstrate that it is an acceptable method of analyzing data for the Children's

Foundation.

Hersen and Barlow note that two of the basic concerns of any scientific endeavour are the variability and generality of the findings. The authors feel that the question of variability in human behaviour must be considered if the human sciences are to develop truly accurate understandings of human behaviour. As a result they feel that variability is a primary concern of any researcher or clinician who seeks to understand human behaviour. In fact the authors see the researcher and clinician as interchangeable terms in single-case studies. For the purposes of this literature review, the term researcher will be used throughout the analysis of Hersen and Barlow's article on the understanding that in fact the clinician and researcher face similar problems in understanding human behaviour.

The question of generality is the second problem that scientific research faces. If research is to be of any use, the researcher must be able to generalize his findings from the group to the population as a whole. As a result he is concerned with the feasibility of generalizing his findings. If it is not possible to generalize his findings, his research project becomes an esoteric study of one particular situation or one particular type of behaviour with no practical application to other clients or other situations.

On the question of variability the foregoing authors note that "the task of the investigator in the area of human behaviour disorders is to discover functional relationships among treatments and specific behaviour disorders".¹ It is important, however, for the researcher to be able to establish that

these relationships exist regardless of other factors impinging upon the client at the time that treatment is provided. Unless the researcher is able to rule out other causes for behaviour change such as environment, family pressures, et cetera, he will be unable to make any useful statements about the benefits of the treatment he is studying.

The authors note that Sidman introduced one approach to eliminating variability in 1960. In Sidman's studies he set about developing a strategy that eliminates sources of variability in human behaviour. He claims that natural sciences, physics in particular, attempt to eliminate sources of variability. It is impossible to eliminate all sources of human variability in the study of human behaviour, but Sidman states that it should be possible for any researcher to isolate a number of the sources of human variability.

In applied research, when control over behavioural histories or even current environmental events is limited or non-existent, there is far less probability of discovering a treatment that is effective over and above these controlled variables. This, of course, was the major cause of the inability of early group comparison studies to demonstrate that the treatment under consideration was effective.²

In the natural sciences the question of subject variability is addressed through the use of statistical analyses which take into account the routine variations in the subject. Sidman notes that the basic rationale for using this approach to statistical analysis is that the variability can then be assumed to equal nil in any scientific experiment. By allowing for subjects to vary and by allowing for some variability in the

statistical procedures, the natural sciences can assume that all variability will total zero. The number of variables below the mean will equalize or cancel out those variables above the mean.

Hersen and Barlow state that this approach in the natural sciences led applied research or research in human behaviour to adopt a similar stance. A treatment is considered effective when it is shown statistically significant. Statistical significance is then equated with clinical significance. In other words, once the statisticians have determined that a particular treatment is statistically significant in demonstrating improvement in human behaviour, clinicians assume that the treatment is also clinically effective. This approach to determining clinical effectiveness creates problems since statistical significance tests can under-estimate or over-estimate the effectiveness of clinical procedures. This approach to determining clinical significance represents a skewing of the problem. The clinician is concerned with treatment that appears clinically effective first, rather than statistically significant. Hersen and Barlow argue that many clinicians have become entangled in the ongoing debate about clinical effectiveness and statistical significance. As a result, a number of clinically effective treatments have been ignored simply because they were not shown to be statistically significant in changing behaviour. In a field where controls and group comparisons are at best haphazard due to the great variability in human behaviour, the authors feel that reliance on statistical significance is a serious error. As an alternative to the attempt to reduce human behaviour to generalities through group comparisons, the authors feel that social research should emphasize human variability.

In any case, whether variability in applied research is intrinsic to some degree or not, the alternative to the treatment of inter-subject variability by statistical means is to highlight variability and begin the arduous task of determining sources of variability in the individual.³

While this presents an enormous task for researchers in the human science field, the authors feel that single-subject design offers the most promising starting point for this approach to human behaviour. The researcher should start by examining the individual as a means of isolating some of the sources of variability in human behaviour. The best approach to examining variability is the use of repeated measures on the individual's behaviour.

Repeated measures are based on the treatment techniques that clinicians use every day in their routine work. Each day that a clinician sees a client, he observes changes in the individual and records these in some form of process notes. This is the major intervention strategy of clinicians. It can quickly become the major research strategy for researchers in the human behaviour field. The most logical starting point for research in the human behaviour field is to use the individual as the subject of research and to study his behaviour through repeated measures.

An additional benefit of single-subject design is the ability of the researcher to change the scope of his research project easily. Where behaviour changes are observed or new variables become evident, the researcher can include these in his design.

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The task confronting the applied researcher at this point is to devise experimental

designs to isolate the cause of the change, or lack of change. One advantage of single-case experimental designs is that the investigator can begin an immediate search for the cause of an experimental behaviour trend by altering his experimental design on the spot. This feature, when properly employed, can provide immediate information on hypothesized sources of variability.⁴

The authors believe that single-case designs may highlight three patterns of individual variability. The first pattern of individual variability is the failure of an individual to respond to a therapeutic intervention or treatment. Through the use of repeated measures it is possible for the researcher to identify situations where an individual fails to respond and to modify his treatment approach. This assists the individual in changing his behaviour and also assists the researcher in understanding how to change human behaviour.

As an example of a situation where single-case design highlighted the failure to improve in treatment, the authors cite an experiment conducted in 1974 which was designed to increase heterosexual arousal in homosexuals. In this particular research project the authors elaborate on two particular cases where two individuals were shown a series of slides designed to encourage heterosexual arousal. In the first case the researchers observed an increasing heterosexual arousal in the first subject. In the second case, however, the authors note that the individual failed to respond to a number of the slides. As a result the researchers were able to change their therapeutic intervention and once again increase the arousal in the second subject.

These two cases, Hersen and Barlow argue, present convincing evidence of the advantages of single-case studies. If these two individuals had been part of a traditional experimental design and their responses to slide material had been analyzed on a comparative basis, then the researchers conducting this particular study would have been left with a weakened response rate to the material presented to the subjects. Since one subject demonstrated arousal and continued to demonstrate arousal to the slide material, his response rate would be rated as high or positive. However, the second subject failed to respond after the initial slide presentation and his responses would have decreased or lessened the high positive responses of the first subject. As a result, the authors argue that had traditional statistical analysis been conducted on these two subjects, the overall effectiveness of this treatment modality might have been ignored simply as a result of the large variability between two subjects. Consequently, an effective treatment technique for increasing heterosexual arousal in homosexuals may have been discarded since the results appeared statistically weak or insignificant.

Merely observing the "outcome" of the two subjects at the end of a fixed point in time would have produced the type of inter-subject variability so common in outcome studies of therapeutic techniques. That is, one subject would have improved with the initial classical conditioning procedure while the other subject remained unchanged. If this pattern continued over additional subjects, the result would be typical "weak" effect (Bergen and Strupp, 1972) with large inter-subject variability.⁵

On the other hand, the use of single-case design highlighted this variability between subjects and enabled the researchers to modify their treatment approach for the second individual who was failing to respond to treatment. This particular approach to research merges both practitioner and researcher in a role of applied researcher. Here the clinician can practice his art and at the same time conduct research into treatment techniques. As a result of a single-subject design approach, the applied researcher can establish which techniques are effective in dealing with a particular problem.

A second type of variability that Hersen and Barlow describe involves subjects who appear to improve spontaneously. In this situation the authors state that individuals appear to improve without intervention or therapy. Again, citing their studies with homosexuals the authors examine particular cases where the individual appears to demonstrate spontaneous improvement. The authors state that this particular study was able to demonstrate that subjects improved during a "control phase". The single-subject design demonstrated that improvement in sexual arousal occurred in a phase in which treatment was not being provided. As a result the researcher was able to demonstrate the huge amount of individual variability that can occur between individual subjects.

A final type of variability that single-case designs can isolate is the cyclical type of variability. Here the authors note that some behaviour varies in a cycle or pattern. This cycle may be regular or irregular, but will affect the results that any research project obtains in measuring an individual's behaviour. By taking a continuous number of measures of that

behaviour it is possible to isolate a pattern of behaviour.

As an example, in one case a researcher isolated an individual's asthma attacks as occurring after meetings with her mother. Once this pattern of behaviour was identified it was possible to treat the cause of the asthma attacks, i.e. the relationship with the mother. The benefit of repeated measures in this case was that the researcher was able to identify through a close observation of the individual and the individual's activities one of the apparent causes of her asthma attacks. By having the individual reduce the number of visits to her mother, the occurrence of asthma attacks reduced from daily attacks to nine asthma attacks during a twenty-month period. The use of repeated measures enabled the researcher to isolate an apparent cause of this particular individual's problems and was able to assist the individual in reducing some of her difficulties with asthma through identifying one of the contributing factors to her attacks.

Hersen and Barlow state that it is important in single-subject designs to present all behaviour in reporting research results. This allows the researcher or reader to review the data collected and observe the intra-subject variability.

... the conservative and preferred approach of data presentation in single-case research is to present all of the data so that other investigators may examine the intra-subject variability first-hand and draw their own conclusions on the relevance of this variability to the problem.⁶

By presenting all of the data for other researchers to review it is possible to identify any of the previously mentioned sources of variability

in the study.

The next question that Hersen and Barlow address is the effect of variability between subjects on the generality or generalization of findings to other subjects. The frequent changing of an experimental design in mid-experiment is contrary to "one of the most cherished goals of any science - the establishment of generality of findings".⁷ Generally, in applied research or single-subject design, inter-subject and intra-subject variability create problems for generalizing findings to other populations. As a result it is not surprising that these two sources of variability are the greatest problems that researchers face in attempting to make comparisons between the individual subject and the population as a whole. Inter-subject and intra-subject variability are conditions that researchers who attempt to make comparisons between a group and the population as a whole must also consider.

Hersen and Barlow state that there are three types of generalization which are possible in research. The first type of generalization involves the generalization of an attitudinal or behavioural change from a treatment setting to other aspects of the individual's life. For Children's Foundation this represents the transfer of a change in the child's behaviour while at Children's Foundation to the child's home environment. This type of generalization or change involves observing what behavioural changes that occur in the individual in treatment survive outside the treatment environment.

A second type of generalization involves the generalization of findings across subjects or individuals. Here the question is "if a treatment effects certain behavioural changes in one subject, will the same treatment

also work in other subjects with similar characteristics?"⁸ In this situation the researcher asks whether or not it is possible to state that his treatment will be effective in treating other subjects. In other words, if a particular type of treatment works with one individual, is it likely that similar techniques will work with a whole group of similar individuals with similar problems?

Another type of generalization is the generalization across behaviour change agents. In other words, can one therapist use behaviour change techniques developed by another therapist equally as effectively? As an example the authors ask whether or not the classroom control techniques that a young, attractive female teacher uses will be equally successful as an older teacher in her own classroom.

A final type of generalization involves the question for research of whether or not generalization will occur in a variety of settings. In other words, is it possible to use the same behaviour management techniques in a school and in a summer camp? Here the authors ponder the question of whether or not a particular therapeutic technique even if applied in exactly the same manner will be effective in two different treatment settings.

Single-case research designs have limitations in providing generalization to other populations. However, the authors state that group designs have similar problems in making generalizations about their outcomes. The researcher who uses the single-subject design faces the problem of making inferences from a single-subject to other clients with similar behaviour disorders. While single-subject design seems to have some limitations in

this area, the authors identify at least two difficulties that group designs also face in generalizing their findings to other populations. First, there is the problem that group designs face in making inferences from a homogenous group to the population as a whole. In making such inferences the researcher is forced to assume that the homogenous study group is representative of the population as a whole. Secondly, there is the continuing problem of the average response of the individual. Here, the researcher uses group analysis or a group design in analyzing the data obtained from a research project and then applies the average response of the individuals to the understanding of the behaviour of the population as a whole. Each of these problems limit the usefulness of group designs in generalizing findings from the study group to the population as a whole.

Hersen and Barlow go on to elaborate on the problem of generalizing from a sample to the population as a whole. They note that traditional experimental design research depends on random sampling of a population so that inferences can be made from this randomly drawn sample to the population as a whole. The difficulty with group designs in the behavioural science field is that random samples are seldom available. For example, if individuals wish to study schizophrenics, while it might be possible to draw a sample of schizophrenics, the broad use of this term as a diagnostic category creates a problem for determining exactly what characteristics an individual must have to be considered schizophrenic. As a result any attempt to generalize findings from one group of "schizophrenics" to another face the difficulty in defining exactly what is meant by schizophrenia.

A second problem that researchers using comparative techniques face is the problem of having enough clients available with specific behaviour

characteristics to provide a sample. Frequently researchers are forced to study a population that is handy, which results in an inadequate sampling of the general population. Researchers are frequently using clients with particular characteristics simply because they are available or they come to the attention of researchers more readily than a wider sample of individuals with the particular difficulties or problems the researcher is studying.

As a result, making inferences from this randomly selected sample is difficult. In fact Hersen and Barlow would argue that this sample is in fact not a representative sample of the population simply because this type of sample is frequently not randomly selected due to a lack of availability of particular clients. Inferences from this sample are not likely to be accurate since it is not representative of the population as a whole.

The second problem that group-research designs face is the problem of making a generalization from the group to the individual. The argument made for obtaining an adequate sample through the random sampling procedure in turn seems to be an argument for obtaining a very large sample. The authors note, however, that the larger the sample the more difficulty the researcher has in making inferences from this large sample to the individual. The authors argue that "the more heterogenous the group" the less representative the group will be of a given individual in the group. The process of averaging results means that the average of the group will not represent individuals who are on extreme ends of the group or whose behaviour varies in any one of the previously described ways. Again, the researcher using a group analysis may lose the benefit of a particularly useful therapeutic technique

by having its effect weakened through the averaging of results across a large population. The use of a large group is of little benefit to the individual since the benefits of any particular therapeutic intervention for an individual might be lost through the averaging of the outcome effects which reduces the apparent effectiveness of the therapeutic intervention.

As a result of the arguments that Hersen and Barlow present regarding variability and generality of findings from research projects, the question has to be asked, which type of research design (single-case experimental design or group experimental design) is likely to be the most useful in the study of human behaviour? The authors go on to explain some of the merits of single-case experimental designs over the use of homogenous group designs. In their defence of single-case designs, the authors argue that the replication or use of single-case designs across a number of patients does provide a degree of generality of findings. By studying individuals and using the same treatments in a number of individual cases it is possible to compare the outcomes of individual cases. This provides a means of comparing or making generalized statements across patients without losing the individuality of the patients involved. This preserves the uniqueness of the individual, provides the researcher with a great deal of valuable data on the effects of his treatment and allows for the practitioner through repeated measurement of the patient's functioning to observe variability and changes in the individual's behaviour. In addition, the single-case design provides additional flexibility to the researcher since the research design can be easily changed or modified to provide continual improvement in the individual's behaviour. Finally, it is possible to observe an individual's

behaviour when treatment is not being provided to document the effectiveness of treatment.

The authors argue that the appropriate type of design for single-case design would be an ABAB design where A represents a baseline measurement period in which baseline measures are taken on the client's behaviour and B represents an intervention period. Through repeated measurement and observation periods, it is possible for the researcher to observe improvement in the individual's behaviour and to modify or change his own intervention techniques in response to apparent rapid improvements in the individual's behaviour.

While one of the shortcomings noted about the single-case design is that it cannot provide generality or generalizations across different settings, therapists or types of particular behaviour disorders, the authors feel that this is possible when therapists using similar techniques begin to share information about their individual successes or failures. Once again the single-subject approach provides researchers with information that is valuable in developing generalized theories about human behaviour by allowing comparisons across individual behaviour. At the same time single-subject designs continue to protect individual variability through the study of the individual rather than the study of the group.

While direct replication can begin to provide answers to questions on generality of findings across similar clients, the large questions of setting and therapist generality would also seem to require significant collaboration among diverse investigators, long-range planning,

and a large investment of money and time - the very factors that were noted in Bergin and Strupp (1972) to preclude these important replication effects.⁹

Alan E. Kazdin's chapter in Hersen and Barlow provides an outline of some of the arguments in favour of the use of statistical analysis in single-case experimental designs. In this chapter Kazdin provides some suggestions as to the appropriate types of statistical analyses that a researcher might consider in conducting single-case research. In his chapter, Kazdin notes that "a salient issue in the controversy over the use of statistics pertains to the criteria for evaluating change".¹⁰ A brief review of this discussion is useful since Kazdin identifies a number of statistical tests that might be useful in single-case design.

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The first question that arises in single-case design is the question of clinical significance. Clinical significance refers to an observed improvement in the individual's functioning between the beginning of treatment and the end of treatment. This idea of significance varies from statistical significance. Clinical significance is concerned with the improvement of the individual's behaviour to an acceptable level of functioning and is not concerned with the improvement of a large number of individuals at one time.

When a behaviour is altered, as evidenced by objective data, and when individuals in contact with the client indicate that the original behavioural goal has been achieved, the program has obtained a change of clinical significance.¹¹

As a result clinicians are more concerned with clinical significance than statistical significance. This contrasts to the traditional approach of experimental research which is more concerned with the comparison between the performance of a group of individuals who have been treated and a group who have not received treatment. The clinician, on the other hand, wishes to measure the degree to which his intervention has assisted the individual. Through the replication of the treatment on other problem behaviours the clinician may be able to establish the reliability of his treatment methods by producing similar changes in behaviour. As a result, the need for statistical analysis might be argued to be minimal, since the research design provides methods for graphing client behaviour and demonstrating improvement over time. In addition, the research technique provides for reliability measures through a replication of the treatment on the client which should demonstrate a similar change in the client's behaviour between treatment and non-treatment phases.

However, Kazdin notes that the rejection of statistical tests should be carefully considered. He quotes an earlier article by Campbell in which Campbell notes that social scientists must "work with low-grade ore in which tests of significance are necessary".¹² Kazdin notes that many clinicians have still rejected the need for statistical tests despite the apparent threat of "low-grade ore". Such clinicians accept empirical evidence of improvement in the individual as evidence of clinical significance and ignore questions of statistical significance.

A second objection to statistical tests in single-case design is the criticism of group research and group statistical analysis which has been

presented earlier. Many clinicians argue against the assumptions that are necessary for statistical tests, such as the representativeness of the sample population, the problems of obtaining representative samples, et cetera. However, despite these objections, Kazdin goes on to describe some of the situations in which he believes single-case designs should employ statistical analysis. In situations where the researcher is unable to establish a stable baseline pattern of behaviour, statistical analyses should be used. In these situations statistical analyses help determine the significance of any change in the individual's behaviour. These analyses enable the researcher to determine whether the change that has occurred in behaviour increases significantly with the application of therapeutic techniques. In other words, has the observed change occurred by chance alone or has it occurred as a result of some other factors, such as the treatment process?

Statistical analyses are also useful in the investigation of new clinical techniques. Hersen and Barlow encourage clinicians to chart behaviours on a graph. From this graph it is possible to observe improvements or trends towards improvement in the client's behaviour. However, in areas involving new research or new techniques it is important to use statistical analysis to determine whether the visual trend represents a significant change in the individual's behaviour. Kazdin argues that "where the results are ambiguous, statistical evaluation can assess whether the effects are reliable".¹³ Kazdin also argues that statistical analysis can establish subtle patterns in the data that may not be readily apparent to visual inspections.

A final argument in favour of the use of statistical analysis involves the presence of an increased intra-subject variability. Much research is applied in an environment where control over variation is limited. The subject may demonstrate increased intra-subject variability in these circumstances. As a result it is important to use statistical evaluation to determine with some degree of precision whether changes in the subject as a result of treatment are significant.

In summarizing the case for and against statistical analysis, Kazdin states he cannot resolve the conflict between these polar opposites. However, it is his feeling that the use of statistics is beneficial in single-case experimental design projects.

As a final argument for the use of statistics Kazdin discusses the concepts of serial dependency and its implication for conventional statistical analysis. He notes that in the case of repeated measures on the same individual that the assumption that the measurements taken are independent of each other is erroneous. These successive observations of individual behaviour are correlated with one another since one expects the second observation to include some carry over effects from the previous phase or observation. He refers to this as autocorrelation.

In the case of continuous or repeated measures over time, the assumption of independence of observations usually is not met. Successive observations in a time series tend to be correlated. Thus, knowing the level of performance of a subject at a given time allows one to make predictions about the subsequent points in the series. The extent to

which there is dependency among successive observations can be assessed by examining autocorrelation (or serial correlation) in the data.¹⁴

Traditional statistical assumptions, that measurements which are being compared are independent, do not apply in the case of repeated observations of the individual. One expects a subsequent measure or a subsequent observation of an individual to reflect changes or learning as a result of the involvement of the researcher in the individual's life. Thus, the measurements taken at time one and time two cannot be assumed to be independent of each other. Behaviour at time two will reflect some of the effects of intervention or even measurement at time one. If the clinician assumes that measures taken at time one and time two are independent, then he also has to assume that any clinical treatment that he provided in time one was totally ineffective in changing the individual's behaviour. For the two measurements to be independent one must assume that the first measurement had no effect on the individual's behaviour at time one. Hence, it is then possible to decide that time two is an independent measure of the individual's behaviour and that any change during that time period can be compared directly with time one. This, unfortunately, is incongruent with learning theory, which says that individuals learn as a result of experience. Consequently, the intervention at time one, even if it is an observational time period, cannot be assumed to have no affect on the client. Thus, intervention at time two would reflect some carry over effects from the initial period of observation. The data collected in these two time periods may be said to be autocorrelated, or dependent on one another.

The importance of autocorrelation is that it supports the use of statistical analyses as a means of sorting out the relationship between measures taken at different time periods. This allows the clinician to determine whether a significant change has occurred in client behaviour between two periods of observation or between a period of observation and treatment by taking into account the degree to which the second time period is related to or autocorrelated to the first period. As a result, Kazdin presents two types of statistical tests that can be used in addressing the problems of autocorrelation.

The statistical analyses that Kazdin suggests are appropriate to single-case design include the t test and ANOVA or Analysis of Variance tests. The t test provides the clinician with an assessment as to whether the baseline and intervention means are different enough to suggest that major changes have occurred in these two time periods. On the other hand, ANOVA or the Analysis of Variance allows the clinician to determine whether the variance between time periods is statistically significant. Thus the clinician can determine whether his observations at time period one and time period two represent a significant change in the behaviour of the individual. Basically these statistical approaches to the analysis of single-case experimental design data enable the clinician to determine with some degree of certainty that the apparent difference between the A and B phases in an experiment are significant enough to enable him to assert that these changes in behaviour are not only clinically but statistically significant and represent a significant improvement in the individual's functioning.

The points that Hersen and Barlow and Kazdin make in their discussions of single-case designs are useful to the analysis of Children's Foundation data. In their discussions they present some of the problems of human variability and the types of variability that researchers in this field may encounter. They discuss some of the problems of generalizing from the study of one individual to a number of different individuals. They also discuss some of the problems in determining clinical and statistical significance in single-case designs.

The implications of this work to the Children's Foundation evaluation project is that the evaluation project at the Children's Foundation is a type of single-case design. The evaluation project originally attempted to develop an experimental and control group for the analysis of the data. However, after the initial pre-testing of the instruments, no further attempt was made to isolate the control group for comparison purposes. Thus, in analyzing the data at Children's Foundation it is not possible to use comparative statistical analysis for the analysis of the data. All the data that Children's Foundation has collected is on the same population of children and families who have been treated at the Foundation. As a result there is no untreated population with which to make a comparative statistical analysis. The text by Hersen and Barlow provides the major arguments for the use of a single-case level of data analysis at the Children's Foundation.

The techniques used in single-case analysis can be applied at the Children's Foundation without creating any ethical problems or requiring the Foundation to conduct a massive research project involving the use of treated and

untreated populations. The analysis of single-cases over a number of years also provides the Foundation with an opportunity to build up enough single-case studies to do some comparative analysis of their outcomes. Finally, single-case analysis provides the distinct advantage of giving immediate feedback to the Foundation on the families they are working with. Hersen and Barlow suggest that repeated measures over the course of treatment may be useful in determining the trend in family behavioural improvement. Further benefits from single-case studies include the possibility of re-designing the evaluation project to include additional measures on each family which will provide increased generalizability and validity on the information collected. It is the contention of this researcher that single-case design can be used beneficially at Children's Foundation to assist in planning for families and to assist the Foundation in working more effectively with families. Single-case studies allow quick adaptability and constant monitoring of families and individuals. Consequently the material that Children's Foundation collects on families not only assists the daily planning for families but also may assist in the evaluation of their program.

Campbell and Stanley provide a number of ideas with regard to the study of single-cases where experimental research designs are not possible. The designs that Campbell and Stanley describe are defined as quasi-experimental designs. These authors present additional material which is useful in understanding some of the difficulties that research design in the human behaviour field faces. A brief review of some of the material from Campbell and Stanley is therefore useful in understanding some of the difficulties that the Children's Foundation evaluation project may face in collecting valid data.

As an introduction, Campbell and Stanley review twelve factors which they feel represent threats to both internal and external validity in any research design. These threats create problems for researchers who want to establish a causal relationship between variables and want to be able to state that the relationship between these variables is a direct one. Unless the researcher is able to control for or account for each of these twelve variables, the authors believe he will be unable to assert that the observed effect is directly correlated with an experimental treatment. Such an assertion is not possible since it can be equally argued that any one of the twelve threats to internal or external validity may also account for the observed changes in the subject's behaviour. It is therefore important to control each of the twelve items that Campbell and Stanley describe in order to be able to state categorically that the observed effects are direct results of the experimental treatment.

Claire Selltiz describes three elements which are necessary in order to state that any relationship between two variables is causal. First of all she notes that a causal relationship is one which describes the relationship between two variables and states that "X 'causes' Y".¹⁵ A researcher must be able to demonstrate co-variation between the cause and the effect. By co-variation Selltiz refers to the observation that as X moves in one particular direction, then Y changes its behaviour in another specific direction. Thus, the researcher is able to assert that as certain behaviours occur in X, one can expect a certain response in Y.

A second consideration in demonstrating a causal relationship exists is the time order or sequencing of events. A researcher must be able to demonstrate

that X occurs before Y in every instance where X and Y move in the specified directions. If X does not occur before Y and Y begins to change in the expected direction, then it is possible to assert that X is not causing the change in Y since the X event has not occurred when Y begins to change.

Finally, a researcher must be able to eliminate all other plausible explanations for the behaviour of X and Y. This involves the elimination of external factors and internal factors which might otherwise explain the behaviour of X and Y. The elimination of these internal and external factors relate directly to Campbell and Stanley's concern about the threats to internal and external validity. As a result a brief review of Campbell and Stanley's article provides a list of some of the factors that researchers must consider in order to be able to establish causal relationships between variables.

The concepts of internal and external validity are important factors in any research project. Nachmias and Nachmias define internal validity as the process through which other factors can "be ruled out as rival explanations of the observed association between the variables under investigation".¹⁶ In other words, for a researcher to maintain internal validity he must demonstrate that no rival hypotheses can explain the behaviour of the subject other than the supposed relationship between the subject's behaviour and the causal factor. External validity on the other hand is "the ability to generalize the results"¹⁷ of an experiment to other populations and other subjects. External validity refers to the researcher's ability to generalize his findings from the sample population to the population as a whole. If he discovers a particular relationship between a schizophrenic individual and his father, he is able to make a generalized statement about the nature

of this relationship for all other schizophrenic patients and their fathers. The accuracy of this generalization depends upon the researcher's ability to maintain a high degree of external validity. In other words, if the researcher is certain that his sample is representative of the population as a whole, he is then able to reach conclusions that the behaviour of the sample is similar to the behaviour that might be observed in the population as a whole. Consequently, a generalization from the sample he studies to the population as a whole is an accurate statement of the state of affairs for the entire population of schizophrenic patients and their relationship to their fathers.

This brief diversion from the examination of Campbell and Stanley's article provides the basis for considering the items that Campbell and Stanley raise as important to internal and external validity. In addition, the diversion emphasizes for the Children's Foundation evaluation project some of the important considerations in determining future directions for the evaluation project. It also affects the conclusions that this researcher may make about some of the results the Children's Foundation data produces.

The first factor that Campbell and Stanley identify as a threat to internal validity is history. By history they are referring to events that occur between the first and second measurements in any experiment. As a result of history an individual might change his behaviour. If a researcher is not careful to rule out history as a rival explanation in his research design, the researcher may erroneously attribute the change in the individual's behaviour to the experimental treatment and fail to recognize the change as a result of history.

In Children's Foundation history is an important consideration in determining the effectiveness of the program at Children's Foundation. Since the child has continuous contact with his family on weekends and through family sessions it is important to consider any changes in the family that may occur between the probes administered at the Foundation. For example, in some cases the family is reconstituted between the time that the initial probes are completed and the time that subsequent or final probes are completed. In a number of cases parents have separated or re-coupled during the time period that the child and family are receiving treatment from the Children's Foundation. These represent significant changes in the family's life history and obviously will affect the child's behaviour in the family. Consequently it is important to consider the effects of history on a child's behaviour at the Children's Foundation.

A second threat to internal validity which is similar to history is maturation. Here, Campbell and Stanley refer to the simple process of maturing or growing older. The maturation process may produce changes in an individual's behaviour which are a response to the normal growth and development process.

Once again, the effects of maturation on a child's behaviour could be significant. The degree to which a child's behaviour changes through the simple maturation process may be significant. As a result, in considering the results from the Children's Foundation care has to be taken to consider the effects that maturation may have on the child's behaviour, both at home and at Children's Foundation.

Two areas which relate to the procedures involved in experimental design and which are threats to internal validity are testing and instrumentation.

First, Campbell and Stanley describe testing as the effects that occur when one test affects the taking of a second test. In other words, an individual's behaviour or response to a particular test or test item, may be influential in the way that that same individual responds to a second testing. Thus, the difference in response that the researcher observes between the first and second tests may be as a result of the testing procedure rather than as a result of some change in the behaviour of the individual. Instrumentation, on the other hand, refers to changes in the method of measuring, observing or scoring a particular individual's response to an experimental treatment. These changes in scores or measurements may be confused with natural changes in behaviour. Thus, if a researcher is not careful in ensuring that testing and instrumentation threats are removed from the experimental design, it is possible to confuse the effects of these two variables with the actual effects of the experimental treatment.

These two procedures represent significant threats to the validity of the Children's Foundation results. First, the question of the affects of repeated testing on the results of those tests is a primary concern. Since the parents and the child continue to complete the same test instruments there is a question as to the affects of repeated testing on the outcomes of those tests. Although the tests are completed several months apart and in some cases perhaps as much as a year apart, the question as to the affects of repeated testing on the results is still significant. Since the probes that parents complete are the only sources of data currently used by the Children's Foundation in their evaluation project, the reliability of these results is a serious question. Consequently, it is important for Children's Foundation to be able to address to some degree the affects of repeated

testing on test outcomes.

The second area of concern is the instrumentation effects. This is perhaps the more serious of the two procedures involved in the administration of tests since the instrumentation of the test can easily change from one probe to the other. Perhaps the most significant concern is the manner in which the questionnaires are completed at each probe. Since the same family counsellor may or may not be conducting the completion of the questionnaires there is a serious concern over the manner in which these questionnaires are explained to parents and in which parents complete these questionnaires. Since the questionnaires are completed at such extensive time intervals there is a distinct possibility that the original family counsellor may have resigned and moved on to a new job, so that subsequent probes are being conducted by a different family counsellor. In addition, the probes are completed in different environments and as a result under different environmental influences, i.e. at the agency or at home, supervised by a family counsellor and unsupervised. Consequently, the question of instrumentation is a serious concern in the interpretation of the results that the Children's Foundation obtains from the completion of these probes.

A fifth threat to the internal validity of any study is statistical regression. Campbell and Stanley describe statistical regression as a situation in which groups who are studied are selected for study on the basis of their extreme scores in one particular area of behaviour. As a result of their extreme scores there may be a tendency for this type of individual to regress towards more normal behaviour. This change in behaviour can then be confused with the effects of the experimental treatment. As a

result a researcher must be careful to ensure that statistical regression effects are not confused with the actual effects of the experimental treatment.

Again at Children's Foundation statistical regression may be a serious concern for the evaluation project. Certainly the children who are admitted to Children's Foundation are selected on the basis of extreme behaviours. As a result there may be a tendency for these children or their families to demonstrate some degree of statistical regression or amelioration of their extreme behaviour towards more normal and acceptable behaviour. This may be a more difficult area for Children's Foundation to address in the evaluation project.

A final concern for the Children's Foundation evaluation project is experimental mortality. This represents the selective loss of individuals under study. Campbell and Stanley refer to experimental mortality as a reflection that certain types of individuals may withdraw from an experimental treatment. As a result it is important to keep in mind which individuals withdraw and for what reasons. Such an observation may quickly identify a particular client population or a type of individual who does not respond to treatment and who withdraws from treatment rather than continuing it. A researcher may obtain results that reflect positively on a program while in fact the people who really require the particular treatment have withdrawn from the program. When a researcher considers the individuals who stay in the program and those who withdraw, the true effectiveness of the program may become more apparent and may appear less effective.

Again, the effects of experimental mortality are important for Children's Foundation. A number of clients fail to complete the probes or withdraw from treatment prior to the treatment contract being completed. These individuals have not been studied by the Children's Foundation since data is not available on them. Consequently it is important to consider what patterns of withdrawal emerge since this will reflect the true effectiveness of the program.

Finally, Campbell and Stanley review some of the threats to the external validity of a research project. Again, the external validity of any research project reflects the ability of a researcher to generalize his findings from one group to the population as a whole. While the Children's Foundation evaluation project is not attempting to make generalized statements about the implications of its findings from its evaluation project to any other population, it is important to consider some of the factors that the authors identify since it will affect any descriptive comparisons that may be drawn between different units at Children's Foundation or between single and two-parent families.

The first threat to external validity which is a concern for Children's Foundation Campbell and Stanley refer to as the reactive or interaction effect of testing. The authors are referring to the tendency of pre-tests to increase or decrease an individual's sensitivity to an experimental treatment. The individual learns what appropriate answers may be required on the questionnaires. In this situation the observed differences between the pre-test and subsequent tests may be as a result of the individual's reactive effects to testing.

Again, this reactive effect is important to the Children's Foundation evaluation project since the same instruments are used on three or four different occasions. While this particular research project is not attempting to make comparisons between the results of Children's Foundation and any other organization, it is important to consider the reactive effects of repeated testing since the same instruments are used a number of times by the Foundation. In addition, the Children's Foundation may have been interested in originally designing the evaluation project in a statistical comparison between the effectiveness of their program and other programs. If, in fact, the threat of closure motivated the Children's Foundation to introduce evaluation to demonstrate the effectiveness of its program, then the impact of any threats to external validity is to reduce the apparent effectiveness of the program. By failing to control for the threats to external validity, the ability of the agency evaluator to generalize his findings to other agencies or make comparisons between the findings of the evaluation project and the results of other agencies is limited.

A second threat to external validity which is important to the Children's Foundation is the effect of multiple-treatment interference. This particular issue is problematic for single-case and repeated measurement designs. The question is what effect prior treatment has on the individual. Hersen and Barlow discuss the problem of autocorrelation. However, there is also a concern about the effect of previous treatments that the family or the child may have received from other agencies prior to coming to Children's Foundation. The effects of these treatments may not be erasable and the impact that previous therapists had on the family or family functioning may determine the degree to which the family appears to improve or not improve in

treatment at the Children's Foundation. It is indeed possible that the children that arrive at Children's Foundation are in fact the 'last chance' children or families. In other words, these families may have been offered all alternatives that seem feasibly possible and Children's Foundation may be the last stop in a search for appropriate services. This has implications for the eventual outcomes of treatment. If, in fact, the Children's Foundation is dealing with children who have failed at many other treatment programs, then it may be expected that the results that Children's Foundation obtains may be low simply because of the nature of the difficult population that the Foundation works with. In this particular case it may not be surprising to find a low success rate in the families with which the Foundation works. In addition, the family may also be receiving other treatments outside what is happening at the Children's Foundation through regular contact with their own social worker, for example. Once again, the treatment that the family receives through other sources may confuse the treatment goals that the Foundation is working towards. As a result it is important to consider what the effects of prior treatment are.

The importance of these items to the internal and external validity of any research program are numerous. The failure to control for these variables creates problems for a researcher in claiming that the changes in behaviour are as a direct result of the treatment that the family receives. Secondly, a researcher will not be able to state categorically that the same treatment will produce similar results in another population. Unless a researcher makes every effort to control for these particular threats, his ability to make general statements about the effectiveness of his treatment and how it can be applied in other situations is seriously limited.

Martin Bloom discusses single-subject designs in his paper, "Single-subject Designs for Determining the Effectiveness of Your Practice". In this excellent article, he provides an historical example of a single-subject design that Benjamin Franklin used to change three specific behaviours that Franklin felt were problematic. In describing Franklin's method of dealing with this problem behaviour, Bloom is able to outline a simple single-case design that an individual used to change his own behaviour over time. Bloom also describes a number of single-case designs which are feasible and some of the shortcomings of each design.

Bloom identifies six important points in designing a single-case study. First of all he notes that the researcher must select important life events for study. If a researcher monitors important life events then it will be possible to determine when significant improvements in an individual's ability to function improves. Once a researcher has determined which important events he plans to study, he must provide a "clear definition of terms"¹⁸ or, in other words, a clear specification of the behaviour which is to be modified and the methods that will be used to modify that particular behaviour. As a result of these two important steps the researcher can clearly specify which target behaviour is to be changed and the techniques that are to be used to address these target behaviours.

The next step in designing a single-case study is to provide a theoretical background which describes the development and functioning of an individual's behaviour problems. This background provides some understanding of how the practitioner plans to change that behaviour pattern. In the case of Franklin's wish to change his own behaviour, Bloom notes that Franklin made the assumption

that his vices were learned and therefore could be trained or changed. This assumption provided the theoretical background for Franklin to undertake an effort to change his own problematic behaviour.

The next stage in the development of a single-case design is the development of a systematic measurement system. This information system enables the researcher to monitor progress in changing the target behaviours. In some cases clients may be used to monitor their own behaviour and thereby provide further incentive for the individual to change. Examples of this type of client involvement include weight watchers' programs and some stop-smoking campaigns where the individual is asked to record or monitor his behaviour over a set period of time. Such programs provide the individual incentive to observe and modify his own behaviour.

... there is some evidence to suggest that there may be nothing more practical than involving clients in the measurement process.¹⁹

The last two tasks important to any behaviour change program involve the process of providing feedback and a time perspective. Feedback is important to provide the individual with evidence as to the progress of his behaviour change program. This can contribute to greater efforts on the part of the individual to continue his efforts to change his own behaviour. In addition it is important to consider the amount of time that an individual needs to effect behaviour change. It is important to provide sufficient time to allow the individual to change the target behaviours since setting too short a deadline will only result in failure and discouragement for the individual.

Bloom also discusses the difference between clinical significance and statistical significance. Clinical significance represents an improvement in the everyday performance of an individual. On the other hand, statistical or experimental significance represents "adequate performance in the symbolic world of statistics and research design whose goals are to discover functional relationships between variables selected for comparison".²⁰ It is obvious that for the clinician clinical significance is the major goal of his intervention. He hopes to observe a change in behaviour in an individual which represents a movement towards a more adequate social functioning. On the other hand, a researcher is more concerned with statistical significance which deals with establishing that a functional relationship exists between the experimental treatment or the clinical treatment and the observed behaviour change. While statistical significance is of interest to a practitioner, it is not as important to be able to draw a relationship between therapy and clinical results. A clinician is much more interested in immediate results. A clinician may be willing to accept an individual's change as being the result of a number of factors, all of which contribute towards the improvement in behaviour. For a researcher, however, it is more important to establish that a change in behaviour is directly related to a specific activity of the practitioner.

Bloom offers five items that he feels are important to clinical significance. First, he defines social functioning as an important factor. Here, he is referring to a client's ability to function at an adequate level in a social context. Clinical significance for a schizophrenic refers to the fact that the individual no longer has as many dillusional patterns apparent in his day to day functioning. Thus, the individual would be able to function

better on his own and in society which represents a significant improvement in the client's ability to cope.

A second dimension that is important as part of clinical significance is "approximate movement". This refers to evidence of the individual's movement towards the desired behaviour. In other words, this provides a clinician with some evidence that the individual has improved or is improving. Coupled with this facet of clinical significance is the maintenance of such changes over time and environments. It is important not only that an individual changes behaviour but that he also be able to maintain it across environments and after treatment has ended.

Another important dimension of clinical significance is that change in the client's behaviour must not be obtained at the expense of some other individual's adequate functioning. It is not enough for the clinician to improve a particular client's behaviour while he is in a hospital setting only to find that the balance of the family has deteriorated since the individual has improved. With this particular individual the illness may have been a uniting factor among other family members. Thus, once the individual's behaviour improves, the family no longer has a patient as the central uniting concern in the family. In this case the patient may demonstrate marked clinical improvement in his behaviour, however the family would demonstrate rapid deterioration in their own ability to cope as a family.

Finally, Bloom refers to the generalization of change across social environments and social contacts. This is similar to an earlier part of clinical

significance which is the ability of the individual to maintain his behaviour change over time. In this situation Bloom refers to the individual's ability to generalize his new behaviour from the treatment setting to other areas of his life. In the case of the hospitalized schizophrenic, this patient must be able to function outside the hospital in a variety of social settings including work and within his family. Consequently, he must change his behaviour and maintain it both over time and through a variety of environments. Both these items are therefore important for his behaviour change to be clinically significant.

Bloom notes that the split between clinical and statistical significance routinely has divided practitioner and researcher. He sees the clinician as concerned with clinical significance and the researcher concerned with statistical significance. However, Bloom promotes the idea of the "scientific practitioner" who is concerned with both clinical and statistical significance in dealing with individuals and behaviour change.

In discussing single-case design Bloom also briefly describes the split between group designs and single-subject designs. He notes that group designs involve a number of subjects and people and use random selection procedures to select these individuals, since such group procedures involve the collection of a small amount of information from a large number of people. On the other hand, the number of subjects involved in a single-subject design is usually one where the sampling occurs across a population of behaviours of the individual. Bloom feels that single-subject design is intensive research since it deals with a great deal of information on a particular individual. Eventually this allows the researcher to make

specific statements about the behaviour of one individual.

The types of observation also differ from group to single-subject designs. For group designs, a researcher tends to plan the types of observations he wants using fixed means of collecting these observations. Frequently there are standards, scales, interviewing and reliability checks in group research designs. Single-subject designs are extremely flexible in both the material they collect and the methods they use to observe and collect this material. This is a direct contrast to the more rigid and formal data collection processes involved in group designs.

Single-subject and group designs also differ in the way that the data collected is manipulated. In group designs the data is collected and averaged for the entire group. The end result is that a researcher loses the individuality of each subject in the group average. Group designs also use rigorous experimental techniques to increase the validity and generalizability of the material the research projects collect. Single-subject designs use the individual as his own control. The individual's behaviour is often graphed to provide a visual outlying of his behaviour improvement. Single-subject designs tend to be victims of various threats to internal and external validity. In addition, single-subject designs collect a small amount of data on numerous different occasions, whereas the group designs may tend to collect a large amount of data on one specific occasion.

Group designs and single-subject designs also differ in the goals of the research project. In group designs a researcher often uses a control group

for the use of comparison and contrast with the experimental group. The control group enables the researcher to advance his knowledge in understanding a particular type of behaviour and in being able to make predictions about that behaviour. On the other side of the coin, single-subject designs tend to work on what Bloom terms action hypotheses. In other words, the research is interested in gaining an immediate understanding of the individual's behaviour, hypothesizing something about how it can be changed and working towards that change. Thus, this type of design tends to be a more dynamic style of research in which hypotheses are rapidly developed and changed as the clinician works towards assisting the individual in changing his behaviour.

Each of these designs has specific limitations. One of the problems facing group comparison designs or group designs is that there may be ethical objections about withholding treatment from the control group while the experimental group is treated. Group researchers also face the problems of obtaining samples which may be said to be representative of a larger group, problems of losing the individuality of each individual in group averages, and problems of using standardized tests which may be culturally bound and affect the responses of minority groups.

Single-subject designs see fewer clients and face difficulties around encouraging the client to be involved in the process of data collection. Autocorrelation also creates problems for these types of designs. Some of the difficulties generated by autocorrelation, or the lack of independence between measures are discussed elsewhere in this paper.

Bloom's article presents a useful summary of some of the principles of single-subject design. In addition he provides a practical example of how such designs can be used in specific cases such as Benjamin Franklin's use of these designs to change his own behaviour. He concludes that this type of design is useful for researchers in human behaviour since it allows the role of researcher and practitioner to be merged into one specific activity.

The problem of statistical analyses for single-case designs is an important issue.

A cautionary note is in order, however. All the procedures delineated in this article must be interpreted with a great deal of reservation. ... The central issues are independence and autocorrelation. If a correlation of zero is not obtained, some correlation exists, however small it may be. What affect such a small correlation may have on the statistical procedure is unknown at this time.²¹

The implications of this particular quote to single-subject design and the Children's Foundation measurement procedures is significant. For routine statistical analysis on a series of measurements one normally must assume that the results obtained are independent of each other. However, as indicated earlier, learning theory suggests that the results are not independent of each other since the individuals are affected by programs at Children's Foundation. Consequently, autocorrelation is a problem for anyone wishing to analyze the data at Children's Foundation.

Since autocorrelation appears to be a problem in that it is impossible to state that the measurements taken at the Foundation are independent of each

other, the statistical analyses must leave room for error in statistical calculations. The Friedman test assesses repeated measures and adjusts for the problem of autocorrelation. The Friedman test is designed for the analysis of dependent samples where the data are not assumed to be independent. The elimination of autocorrelation in a treatment environment makes no sense whatsoever. If one makes the assumption that the observations are independent then one is forced to assume that the effects of treatment are nil. Consequently, this reflects on the treatment program at Children's Foundation as being totally ineffective since it has not produced any impact on the clients. It is also worth noting that the Friedman test is a part of the ANOVA (Analysis of Variance) family. Jayaratne's arguments, thus, further support the use of non-parametric statistics and the Friedman method of analysis.

It is worth reviewing some of the basic perimeters of non-parametric statistics. Sidney Siegel in his book Non-parametric Statistics for the Behavioural Sciences provides a basic description of the use of statistics in research. He indicates that choosing a statistical test involves a number of steps. First, a researcher must develop a null hypothesis or a hypothesis of no difference. In other words, in the Children's Foundation a null hypothesis would state that no difference exists between the behaviour of a child before treatment and the behaviour of a

child during or after treatment. This hypothesis is formulated so that it can be rejected through a process of collecting evidence while the child is in treatment and demonstrating that the child's behaviour improves. In conjunction with the null hypothesis (h_0) the researcher develops a second hypothesis or alternative hypothesis (h_1). This hypothesis suggests that in fact the child's behaviour improves while he is a resident at Children's Foundation. Thus, the purpose of the collection of data is to reject the null hypothesis and therefore be able to accept the alternative hypothesis of h_1 as being a plausible explanation of the child's behaviour at Children's Foundation.

When we want to make a decision about differences, we test h_0 against h_1 . H_1 constitutes the assertion that is accepted if h_0 is rejected.²²

Thus, the rejection of the null hypothesis suggests a relationship between the child's behaviour at Children's Foundation and the treatment program.

While this particular example might seem simplistic it is the basic process that research in social science and natural science follows. In each case of a research project, a researcher develops a null hypothesis which is

formulated for the specific purpose of being rejected. Through the collection of data he proceeds to demonstrate that in fact there is a difference between the behaviour at one point in time and the behaviour at a second point in time. Through this process the researcher establishes a causal relationship between new behaviour and the experimental variable. Thus, he attempts to prove that the alternative hypothesis is true.

The next step in establishing that the research hypothesis is more plausible than the null hypothesis involves the choice of statistical tests. Once the researcher selects a statistical test he can move on to the decision about sample size and the level of significance. The level of significance is a decision making procedure which allows the researcher to determine a level of results which justify the rejection of the null hypothesis. Establishing this level is quite arbitrary, but researchers generally establish a level of significance of .05 or .01. What this means is that the null hypothesis can safely be rejected with an error factor of only 5 or 1 per cent. In other words, with a level of significance of .05, a researcher can safely reject the null hypothesis and be 95 per cent certain that he is rejecting the hypothesis correctly. The level of significance is thus important in determining when to reject the null hypothesis.

Siegel notes that there are two possible errors that can occur. First he refers to type I error in which the null hypothesis is rejected when it is in fact true. In other words, the researcher sets a level of significance of .05, and collects data on the basis of which he rejects the null hypothesis. In this particular case, if he commits a type I error, then he has rejected the null hypothesis which is in fact true. Type I error involves the rejection

of the null hypothesis when it is true. The second type of error that is possible is type II error in which the researcher accepts a null hypothesis which is false. In this case the data that the researcher collects appears to put the null hypothesis in the 5 per cent range where it should be accepted. By accepting the null hypothesis when it is false, a researcher is committing a type II error.

In any statistical inference, a researcher risks a danger of both types of error. A solution that statisticians adopt is to consider the power function of the statistical test. Siegel refers to the power of a statistical test as "the probability of rejecting h_0 when it is in fact false".²³ In other words the power of a test represents the likelihood that the researcher will correctly reject the null hypothesis. The calculation of power is quite simple. Since power is the likelihood of rejecting the null hypothesis correctly, then the power of the test is represented by subtracting the probability of creating type II error (accepting a false null hypothesis) from 1. In a situation where a researcher opts for a level of significance of .05, the statistical power of this test can be calculated as follows. First, a level of significance of .05 means that there is a 95 per cent chance of rejecting the null hypothesis correctly. To calculate the power of this test the probability of making a type II error is subtracted from 1 to give the researcher the power of his test. Since type I and type II errors are inversely related, in the given example the probability of creating a type II error or accepting a null hypothesis when it is false is .95. The power of this particular statistical test is determined by subtracting .95 from 1 equals .05. Hence this particular test has a very low power. In his article, Siegel suggests that researchers take into

consideration the power of their tests and reach a compromise which "optimizes the balance between probabilities of making the two errors".²⁴

The question of the power of statistical tests is considered in the analysis of the Children's Foundation data. For this reason it is worth exploring the concept of statistical power since this research project opted for a higher power test than is typically the case in most social science research. In fact, B. J. Winer re-emphasizes this point in his text on statistical principles.

The frequent use of .05 and .01 levels of significance is a matter of convention having little scientific or logical basis. When the power of tests is likely to be low under these levels of significance, and when type I and type II errors are of approximately equal importance, the .30 and .20 levels of significance may be more appropriate than the .05 and .01 levels.²⁵

Siegel goes on to describe parametric and non-parametric statistical tests and underlines a number of the concerns and arguments that support the use of non-parametric statistical tests in this research project. He notes that parametric tests make assumptions about the population from which a sample is drawn. These assumptions cannot normally be tested but are merely assumed to exist. In addition, parametric tests require that the information be at the interval or ratio level so that standard mathematical operations can be performed. On the other hand, non-parametric tests can work with data that is at the nominal and ordinal levels of measurement.

Siegel notes that non-parametric statistical tests do not specify any particular perimeters about the population from which the sample is drawn. While

non-parametric tests assume that the data or observations are independent, this assumption is much weaker than the assumptions applied in parametric tests. In reviewing the advantages of non-parametric tests, Siegel notes at least six advantages. First, statements of probability obtained by non-parametric tests are exact probabilities. In other words, since the non-parametric test makes fewer assumptions about the shape of the population or the distribution of a characteristic over that population, it can make exact statements of probability.

Non-parametric tests also work with samples that are extremely small. No parametric tests are available for samples as small as those acceptable to non-parametric tests, unless the exact nature of the population is known. This, of course, is a problem for most parametric tests, since the researcher does not often know the exact nature of the population and is therefore forced to make assumptions about that population. Non-parametric tests can also compare "observations from different populations".²⁶ Siegel notes that none of the parametric tests can do this without making assumptions about the population which tend to be unrealistic.

To use non-parametric tests the researcher only has to be able to rank his subjects on a particular characteristic under study. He is not required to say that one individual has more of this characteristic than the other. Non-parametric tests are able to rank this data, perform statistical manipulations and provide the researcher with an indication of the reliability of the data he has collected. Finally, non-parametric tests have advantages relating to the methods and ease with which the tests can be used. Siegel notes that most methods treat data by classifying them into a scale. In

addition, an individual can easily learn to use non-parametric statistical tests whereas parametric tests tend to be more complicated since they are based on assumptions of normal population distributions.

Two disadvantages of non-parametric statistical tests that Siegel describes relate to the wastefulness of data and some limitations on the analysis of variance. In situations where a researcher is able to obtain all the data necessary to perform a parametric test, then the non-parametric test is wasteful in using this data. In order to improve the accuracy of non-parametric tests, the sample size must be larger than a parametric test. A second shortcoming of non-parametric types of tests is that to date some tests are unable to perform analysis of variance. While Siegel notes that this is also problematic for parametric tests, it can be even more so for non-parametric tests. The Friedman test, however, is part of the ANOVA (Analysis of Variance) family, and analyzes the analysis of variance of ranks. In addition Friedman tests are frequently more powerful than other ANOVA tests, according to Siegel. As a result, Siegel further supports the choice of the Friedman test for the analysis of Children's Foundation data. Despite the shortcomings of some of the non-parametric tests, the Friedman test offers the best alternative for analyzing Children's Foundation data.

First, the analysis of Children's Foundation data involves the analysis of data at an ordinal level of measurement. Non-parametric tests provide the best option for the use of this data since few parametric tests, if any, are able to cope with data at the ordinal level. Friedman's two way analysis of variance enables a researcher to analyze the variance in ranks. As a result, this particular test is the most appropriate test for the analysis

of the Children's Foundation data.

This concludes the first part of the literature survey in this particular chapter and addresses a number of the questions about single-case design as the research design in this particular research study. However, at this point it is also worth reviewing the literature relating to the evaluation of residential treatment. This review provides additional areas that the Children's Foundation might consider in collecting their data. In addition, the review provides additional insight into some of the results obtained through the analysis of the data.

A major concern for research in the human sciences is the generalization of learning across environments. This particular concern is applicable to the Children's Foundation evaluation project since the initial impetus for the project began with a staff concern about the generalization of learning from the Foundation to the child's home environment. Staff at Children's Foundation were concerned about how effective their parent training program was in providing parents and children with the new problem solving techniques that could be transferred from a treatment centre to the child's own home. As a result there were concerns about how children were doing after discharge. Are parents able to maintain the parenting techniques that they have learned at Children's Foundation? In effect, the original concern of the Children's Foundation staff was the generalization of parent learning from Children's Foundation to the child's home environment.

John B. Conway and Bradley D. Bucher discuss some of the issues relating to the transfer of learning from one environment to another. They note that

the question of transfer of learning from one environment to another raises three specific questions.

First: are the training stimulus conditions able to maintain the changed behaviour across time? ... Second: do changes transfer beyond a limited set of training conditions? ... The third question about the generalizability of targeted behaviour change combines the previous two: is behaviour change maintained over time and under non-training stimulus conditions?²⁷

As a result of these questions the authors feel that outcome research is important to answer some of these questions. Recent trends have included re-programming the child's environment or the individual's environment in order to help maintain behaviour changes once the child is returned to his normal environment. This involves a process of modifying the stimulus conditions which have prompted the problematic behaviour in the child. Parents become an important part in the process of modifying a child's behaviour and maintaining that behaviour after the child is returned home.

Once a program is initiated by parents and a change in child behaviour is demonstrated, these changes are often reinforcing for the parents. Not only may the desired change in the child be reinforcing by itself, but the parents may legitimately attribute such a change to their own efforts.²⁸

These authors feel that parents are important factors in maintaining a child's behaviour change after his discharge.

Similarly the authors go on to describe the use of teachers and peers as mediators in maintaining a child's improved behaviour. The authors describe

studies conducted by the Oregon Research Institute in which teachers have been used to maintain child behaviour through a "workbox" method. The concept of the workbox is to provide the child with immediate feedback on appropriate and inappropriate behaviour. Through providing the child with immediate feedback by placing the workbox on his desk or near him, it is possible to provide immediate reinforcers for appropriate behaviour. The Oregon Research Institute has found that this particular type of reinforcer has worked in maintaining the child's appropriate behaviour in the classroom. This is one example where a teacher can be used to continue a behaviour modification program and to encourage appropriate social behaviour from a child.

Another important factor in maintaining behaviour the authors describe as the use of peers. The authors cite Patterson as one researcher who has demonstrated the use of peer reinforcement as a means of maintaining child behaviour. The benefits of using peer reinforcement is that the peers can act as behaviour managers for the target child. Second, the authors state that peers can share in the consequences of appropriate behaviour. In other words, the target child can be provided with a set of goals for which he will receive an award, such as a trip to MacDonald's. The peers in the classroom, for maintaining or assisting the child in maintaining his appropriate behaviour, can share in that particular award. As a result, peers become both behaviour managers for the target child and also receive benefits for the appropriate behaviour demonstrated by the child. The authors note that peers can be used to both modify and maintain appropriate behaviour.

In these particular situations behaviour is maintained by programming the environment. The teacher or the child's peer group are encouraged to act as

behaviour managers for the particular child. However, there are a number of environments where there are no parents, no peer groups and no teachers available to continue the treatment process and to encourage the child to behave in an appropriate social manner. The authors examine the types of non-programmed environments that a child may encounter and the problems that these types of environments create for maintaining appropriate behaviour.

Treatment frequently occurs outside the individual's normal environment and is restricted to a special environment. The question becomes whether or not the individual will transfer the learning from the specialized environment to his normal environment.

Treatment itself may occur outside the environment or in a special temporary modification of that environment. We assume, however, that treatment is restricted to temporary programming and that treatment does not change the client's environment or the behaviour patterns of significant persons therein. 29

The therapist must find ways to free the individual from those factors in his environment which created the problem behaviour or which encouraged it originally. As a result the therapist must enquire what particular aspects of the individual's environment contributed to the problematic behaviour.

A method of assessing how effective the individual has learned to cope with his natural environment is to conduct follow-up studies. Two particular areas of follow-up studies have demonstrated that treatment successes are maintained in the natural environment. These pertain particularly to

enuresis and the treatment of fears or phobias.

There are situations where the individual is returned to a non-supportive environment and the problem for the therapist is to provide the individual with new techniques of coping that will survive the non-supportive environments. A number of techniques might be employed in encouraging the individual to maintain appropriate behaviour in the non-supportive environment. Overall, the general issue is how to maintain behaviour after discharge. As the authors present the material on the maintenance and generalization of behaviour across environments it is apparent that it is important to program the individual's natural environment so that it continues to provide the natural reinforcers to maintain the child's behaviour. Whether the environment is supportive or non-supportive affects the degree to which the individual will be able to maintain his changed behaviour. It becomes an important part of any practitioner's work with an individual to plan for his discharge and to plan methods of providing continuing support for the individual's changed behaviour. It is obvious that the maintenance of behaviour across environments is dependent upon training the individual's environment to provide support for more appropriate behaviours in the individual.

In a similar article, Hill M. Walker and Nancy K. Buckley describe an experiment designed to generalize behaviour across time and settings. They describe some of the concepts that Conway and Bucher previously outlined such as peer programming, teacher training, et cetera. As a general conclusion to this particular programming effort they indicate that the results of employing these types of techniques indicate a strong tendency for individuals to maintain their behaviour across time and settings. In their article they

note that generalization and maintenance of behaviour does not appear to occur naturally after treatment has been withdrawn. They also feel that unless the environment is programmed to continue supporting the modified behaviour or unless the techniques used to modify the behaviour are gradually faded out, it is unlikely that the behaviour will be maintained once treatment is withdrawn. They support earlier suggestions of Conway and Bucher that peer programming or teacher training are effective methods of maintaining the behaviour of an individual after treatment is finished.

The conclusions they reached on three methods of behaviour reinforcement were that these techniques had varying success in maintaining behaviour over time and settings. They noted that peer re-programming and equating stimulus situations were the most effective in maintaining behaviour across time and settings. Teacher training, which does assist the individual in maintaining behaviour, is not as effective in maintaining behaviour change after treatment. In addition, the authors note that "there was an inverse relationship between the amount of staff time invested in the three experimental maintenance groups and the amount of behaviour maintenance achieved".³⁰ In other words, peer re-programming which involved the least amount of staff time in designing and implementing the program resulted in the greatest degree of maintenance of behaviour. On the other hand, the nine hours spent with the teacher training techniques produced the lowest level of post-treatment maintenance of behaviour. The authors support a number of the concepts that Conway and Bucher emphasize in their article. Through a practical demonstration they demonstrate that it is possible to design programs which will assist the individual in maintaining behaviour after discharge. In addition, they underline the fear of many clinicians that behaviour generalization

from the treatment setting to normal settings is low and that clinicians should be concerned about assisting individuals in maintaining their behaviour after discharge.

Some of the implications for Children's Foundation are that post-discharge support and follow-up are likely important in maintaining the child's behaviour change. The Access program, which attempts to provide some of this support and follow-up, should address some of the needs of providing post-discharge or post-treatment support. However, meeting with the family counsellor once a week is only the first step towards assisting the individual in maintaining behaviour. As the authors in this particular article indicate, more thorough post-discharge programs are required if the individual is to maintain his behaviour after discharge.

Donald R. Green et al. describe a parent training program in which the parents are trained to act as behaviour modifiers for their own child's behaviour. The authors note in the introduction to their article that parents are obvious agents who can be used for changing a child's behaviour since children spend a great deal of time with their parents. Wagner, in his study of the generalization of parent training procedures, demonstrates that training parents to modify their child's behaviour can increase appropriate behaviour in the child. The authors describe the aims of their particular parent training program and review the general findings of their approach to training parents.

The first goal of this particular parent training program is to examine a wide variety of parent training techniques to identify the one that is most

appropriate to modifying parental attention to child behaviours. By encouraging parents to pay attention to appropriate child behaviours while ignoring inappropriate child behaviours, parents will be able to alter a child's inappropriate behaviour and reinforce the appropriate behaviour. A second goal of their project is to examine "the durability of desired changes in parent and child behaviours after effective training techniques are identified".³¹ In other words, this particular project is interested in observing how effective the parent training techniques are in encouraging the child and the parent to transfer behaviours from the treatment environment to the natural environment. The project is also interested in examining how generalized the transfer of training techniques are from one activity or one setting to another. The final goal of the project that these authors describe is "to evaluate the relative effectiveness of those parent training techniques identified as effective in producing significant, durable, and generalized behaviours".³²

The studies that Green et al. conducted involved working with parents of elementary school and older children in a training laboratory setting and at home. The children who were selected for this program demonstrated a variety of behavioural problems, had been rejected from local programs and had parents who appeared to be stable in the community in which the program was run. The studies hoped to maintain the parents for approximately two years. In selecting families for inclusion in this particular project the researchers looked for families who planned to be in the area for approximately two years.

This project used single-case research designs which the authors felt were useful for intensive behaviour studies over long time periods. As a

preliminary to the research project, the observers took time-samplings over ten-second intervals to determine the extent of the parent child problems. Using this particular approach the observer watched parent child interactions and counted whether or not the problem behaviour occurred during the ten-second interval during which the parents and child were under observation. The authors note that the observer did not need to know whether or not the behaviour started, continued or ended during the particular ten-second interval, only that it was present. In addition, the researchers had two observers watch each case and code each ten-second interval according to whether the behaviour, as defined by the parents, was present or not. The inter-observers' agreement was eighty-five per cent or higher as to whether or not the particular problem behaviour was present during that particular interval.

During the initial contact with the family the staff met with the parents to have the parents specify the nature of their child management problems. Parents were also asked to rank the severity of these particular problems. Following this initial contact, arrangement was made for the observation period. At this time at least two observers were present to observe family interaction. Parents were asked to schedule four or five sessions per week of approximately thirty minutes in length during which the observers recorded the number of ten-second intervals during which the problem behaviours were present. The observers were present in at least two settings, usually the home and the laboratory.

Once this research project had recruited enough subjects, it began conducting a variety of experiments with these individuals. The first study that the

researchers conducted involved a parent training program in which training was provided through instructions. As an example of this particular technique, the authors describe a four year old child who was being problematic for his mother. The problems included such things as tantrums, aggression, opposition, destructiveness and so on. Through a training session via instructions with the mother, the researchers began observing the problematic behaviour in both the family's home and in the lab. During the observation periods the observers paid particular attention to the instances of non-compliance with parental requests and to parental attention to child behaviours. Typically the parental attentions involved physical or verbal action which immediately followed one of the particular problem behaviours.

In order to assist the parent in dealing with these types of child behaviours, the experimentors provided both written and verbal instructions on how to use the "time-out" technique for dealing with problem behaviour. The researchers then conducted a multiple baseline study to determine the effectiveness of this parent training technique. During the observation period, the child's problem behaviour occurred twenty-seven per cent of the time in the ten-second intervals while the mother paid attention to these problem behaviours twenty-one per cent of the time. However, after the parent training the child's problem behaviour had declined to four per cent of the time while the parent's attention to problem behaviours had reduced to two per cent of the ten-second intervals. On follow-up a hundred and thirty-nine days after the completion of the parent training technique, these figures had reduced to two and one per cent respectively. Thus, the authors demonstrated that through verbal training techniques and the use of time-out, this particular family was able to reduce the problem behaviour significantly.

A second study that the researchers conducted involved parent training through the use of instructions and cues. As an example of this technique, the authors cited another single-case study of a five year old girl who had frequent tantrums, demonstrated aggression and was hyperactive. Once again the researchers used a multiple baseline experimental design and provided the parents with a series of four instructions on how to deal with problem behaviour. First the parent was provided with written and verbal instructions on how and when to ignore deviant behaviours. The next phase involved providing instructions on the use of time-out for problem behaviours. The parent was then provided auditory cues on when to initiate time-out for problem behaviours. Finally, the parent was given instructions to use time-out for inappropriate behaviours - behaviours that the parent had not identified as problematic.

In this particular study the child demonstrated problem behaviours in nine per cent of the ten-second time intervals while the mother paid attention to eight per cent of these behaviours. During the time that the mother was told to ignore the problem behaviours, the child's problem behaviour reduced to eight per cent while the mother's attention to these problem behaviours reduced to three per cent. Once the mother was then given the instructions on how to use time-out and given the cues on when to apply it, the child's problem behaviour reduced to one per cent of the ten-second interval periods while the mother's attention to problem behaviours was the same. When the parent was instructed to use time-out to apply to any inappropriate behaviours, not just the specific target problem behaviours, the parent was successful in reducing the child's inappropriate behaviours from twenty-four per cent of the ten-second intervals observed to six per cent of the

time intervals. Similarly the parent's attention to inappropriate behaviours was reduced from sixteen per cent of the ten-second intervals to five per cent of the ten-second intervals. The authors state that at a six month follow-up, both the deviant and inappropriate behaviours occurred in less than one per cent of the ten-second intervals. Thus, the authors feel that the use of verbal instructions with cues assisted this particular parent in reducing both deviant and inappropriate behaviours to an acceptable level.

The final technique used in training parents to deal with problem behaviours was modelling. In this particular study the authors describe a five year old girl who demonstrated hyperactive and bizarre behaviours which the parents were having difficulty controlling. In addition, the parents were concerned about her academic and social development which appeared to be slightly retarded. During the initial study period the authors managed to indicate both inappropriate and deviant child behaviours which included everything from the misuse of materials in the training lab to attacks on the parents or gross disruptive acts. The parents were then taught to control both the deviant and inappropriate behaviours by observing a person modelling a particular approach to dealing with these behaviours in their child. The modelling process demonstrated the use of praise or food reinforcers for appropriate behaviours. In addition, it demonstrated how to ignore inappropriate behaviours and how to use the time-out procedures for deviant or inappropriate behaviours. The results in this particular case demonstrated that the mother was able to reduce deviant child behaviours from seventy-eight per cent of the ten-second intervals to three per cent after the modelling procedure and inappropriate behaviours from thirty-two per cent of the time intervals to three per cent. The father in this

particular family was able to reduce the deviant behaviours from twenty-seven per cent of the ten-second intervals to eight per cent and inappropriate behaviours from forty-two per cent to seven per cent of the ten-second intervals. Thus, modelling also works as a parent training technique.

The authors conclude that the best technique appears to be the use of written and verbal instructions since it appears equally as effective as the instructions with cues or modelling techniques and involves less professional time. However, the authors note that consideration must be given to the particular case study involved in which the mother in the first case study was a professional nurse and was probably able to pick up on the written instructions more quickly than other parents might. On the other hand, the cueing technique requires more staff time since the staff member must be present to cue the parent as to when to use time-out or when to deal with problem behaviours. Finally, modelling appeared equally successful but the researchers could not conclude whether the success was due to the modelling techniques or improved parental behaviour after observing the modelling technique or both. However, modelling is an acceptable technique for providing parent training.

As a conclusion, this particular article demonstrates that parent training techniques can be effective in changing behaviour. From the use of selective single-case studies the authors are able to provide a follow-up study on each individual case to assess the degree to which parents are able to maintain their problem solving and parenting techniques after discharge. This study provides an example of the usefulness of single-case approaches in dealing with particular problems or particular families. This particular

research study provides three alternate suggestions as to how parents might be trained to deal with problem child behaviours, and then proceeds to test these suggestions under reasonably scientific conditions. The authors reach some conclusions about the effectiveness of particular techniques in training parents to become behaviour managers. If the researchers continue to test these three techniques through a variety of other subjects, they will be able to provide more concrete evidence as to the most effective and cost efficient method of training parents to modify children's behaviours. This particular technique can be used to develop and test theories of parent training without the necessity of expensive and perhaps more rigorous experimental designs involving control and experimental groups.

In a similar study, Philip Carney et al. describe an evaluation project of an attempt to train parents of retarded children in home management techniques. This project was conducted in Ontario in 1977 for the Ontario Ministry of Health. The goals of the project were to provide behavioural training for parents in their homes in order to reduce the training costs, provide training that is closer to normative training and to provide the training in a setting that would be required in the the future, i.e. the child's home. The project also trained the parents to target particular problem behaviours and to deal with those behaviours.

The project met five specific goals. First, the authors stated that "the children would be provided with the most effective therapists, since properly trained parents have greater contact with their children than any other person".³³ By providing parent training the research project provides for the child's future needs by training the parents to cope with the problem

behaviour that parents experience. The project also aimed at increasing the likelihood that children and families will receive services and intervention while the children are still young. The project hoped to provide an educational role for the community by promoting the spread of information on retarded children and effective ways for dealing with the retarded. Finally, the research project felt that by working with parents at home it would run into less difficulties in dealing with ethical issues since the parents would be fully aware of the procedures used to conduct the study and would be involved as a trainer with their own child.

Referrals for the "home management service" were accepted from all sources. Out of the referrals a wait list group was established in which parental training was delayed for approximately six months. The wait list group was designed as a control group for statistical comparison. The families were assigned to team members largely on a consideration of geographic area, while some children were assigned to team members on the basis of interest. Once a referral was accepted, a team member made arrangements to visit the family, advise the family that they were being considered for the home management service and to assess the interaction between the parents and the retarded child.

During the initial visit with the family, the staff member attempted to assess the nature of the problem and the parents' attitudes towards being involved in the behaviour management program. If the staff member found that the parents were willing to be involved in the program, and the problem behaviour was clearly defined, the staff member could introduce to the parents the concept of measuring or recording the problem behaviour on a

simple record sheet. The staff member then made arrangements to re-contact the parents within the next few days for a second appointment during which a second team member would come to the family home to check the parents' measurements on the degree or severity of the problem that the child was creating. Once this process had been completed, it was possible to begin the parent training program.

The project demonstrated that the home management program was successful in providing parents with new skills for coping with their retarded children. It was demonstrated through the use of the wait list or control group that parent behaviour changed significantly in the treated group while the control group remained essentially static. In addition, the authors felt that the treatment effects were maintained over time which demonstrated the parents' ability to learn long term behaviour management techniques. While the authors note that there were problems in the size of the sample available the results are still positive.

While this research project adopted a more scientific and comparative statistical research design, it underlines some of the concepts which have been discussed earlier. It supports the notion that the maintenance of behaviour through time requires the child to live in a supportive environment in which behaviour training or modification techniques continue. In addition, it supports the notion that parents can be used as behaviour trainers for children with problem behaviours, in this case retarded children.

The Penrose Centre Home Management Program
set out to show that parents can be trained in
behaviour management principles and techniques,

and therefore that the behavioural training of retarded children can be carried out 'in the setting that counts', and more closely approximates the 'normal' than does the institution. The project hoped to show that the home visit mediator model of child training would be more effective in bringing about change than parents left to deal with problem situations on their own, and would be less expensive than providing similar training in a residential institution for the retarded. All these goals appear to have been met³⁴

The last studies introduced the concept of maintenance of behaviour across environments. In these studies the authors have discussed techniques that may encourage an individual to generalize his changed behaviour from the treatment environment to other environments. The authors have also noted that the general literature seems to indicate that the transfer of behaviours from a treatment environment to the natural environment does not occur without special efforts on the part of the therapist to provide continued training and support for the maintenance of the new behaviour. This raises the question of follow-up studies and the degree to which follow-up studies are able to shed light on treatment techniques and assist an agency in improving its services to clients. As a result it is worth reviewing a few follow-up studies and their implications for the follow-up study at Children's Foundation.

Paul Lerman introduces the first problem that follow-up studies face in evaluating treatment outcomes. In his article, he discusses the concept of success in evaluating the outcomes of treatment institutions for delinquents. It is "the task of evaluative research to demonstrate that the organization was responsible for the boy's failure or success".³⁵

In his study, Lerman argues that for delinquent boys re-contact with the criminal justice system can be seen as a failure. Success, or the measure of success, must also consider the level of failure. In other words, how many boys were in contact with the criminal justice system after going through the particular program being studied? Lerman feels that any evaluation study dealing with delinquency must consider both successes and failures in order to get a true measure of the effectiveness of the program.

He points out that many programs tend to disregard the boys who drop out or fail to complete a treatment program. Lerman identifies two potential sources of failure in any agency, "internal potential failures"³⁶ and "external potential failures".³⁷ He defines the internal potential failures as children who drop out of a treatment program prior to the completion of the program. These boys are children who receive dishonourable discharges from a program. The second source of potential failures are the external potential failures or boys who have re-contact with the criminal justice system or become involved in delinquencies after discharge. Both these sources of failure must be included in any evaluation.

Many evaluation programs tend to ignore the internal potential failures or those who drop out of treatment and deal only with the external potential failures. In describing one particular program, Boysville, he notes that counting external potential failures gives a failure rate of twenty-three per cent. However, when all the internal potential failures are added to this, the percentage of failure increases to fifty-four per cent, which is significant. As a result, Lerman argues that it is important in any evaluation program to count both the sources or types of failure since this is

the only way to get a true picture of the success of any program. As a concluding statement to his article, he notes that it is time for organizations to be more accountable for the services they provide their clients. A good start to this type of accountability is to keep "track of all people not completing treatment, discontinuing service, dropping out of programs, and running away".³⁸ This type of bookkeeping or accounting for the services that an agency provides might reveal some uncomfortable facts about the relative success and failure of any program. To evaluate success one must also keep in mind potential failures which includes not only those who are found to fail on follow-up but also those who fail to complete the program. This is the only way that a true picture of the effectiveness of any agency can be obtained.

A second interesting consideration in follow-up studies is described by Saad Z. Nagi when he discusses gate keeping decisions of agencies. Nagi describes gate keeping decisions as those decisions that agencies use to screen potential clients for their services. Nagi notes that most organizations or social service agencies have the power to set criteria as to who is eligible for service. It is this type of gate keeping decision that affects the type of client that is accepted into a program. These types of gate keeping decisions affect the apparent effectiveness of the program by predetermining the type of clientele which will be accepted for service.

In any gate keeping decision Nagi feels two processes are discernible. The first type of decision is "based upon objectively defined criteria for which there are concrete indicators".³⁹ Such decisions Nagi feels are routine and based on mechanical criteria that are easy to identify and assess

eligibility for services. However, when such criteria are not so evident a second type of decision process is activated which involves non-routine judgment about the eligibility or application of criteria for individual clients. The non-routine decisions fall along a continuum of clearly eligible individuals to clearly ineligible individuals. Nagi feels that those decisions in the middle which are more difficult to make tend to follow easily identifiable patterns which affect the decision making process. In some circumstances agencies will provide services for someone who might not be fully eligible while in other circumstances will deny services to a similar individual. This is the process of non-routine decision making which is important in the gate keeping decisions of any agency.

Nagi identifies three particular factors which become influential in these non-routine types of decisions. First are those factors that are related to the applicants, such as their educational background, social economic level or status, and so on. These factors clearly affect the types of decisions that are made about providing services to such clients. A second type of factor is related to the decision makers themselves. Here, professional ideologies become important in the decision making process. Finally, factors relating to the organizations affect the types of decisions made. Nagi points out that organizations frequently base their decisions on either the risk of rejecting or accepting a deserving or non-deserving client.

Organizational influences on decision making processes can be quite extensive. He notes that organizations must demonstrate the need for their services in the community and consequently when demands for services are low may accept clients normally ineligible for service, simply to be able to have

a full program. When service demand is low, organizations might even begin to redesign their eligibility criteria in order to ensure that they are able to justify their existence. On the other hand, when service demand is high, one expects the reverse type of decision making where organizations select only a 'better class' of client.

This type of influence on decision making obviously has an impact on the apparent effectiveness of the organization. As a result, gate keeping decisions become an equally important consideration in any evaluation project. It is possible for an agency to be in such demand that it accepts only the best type of client and rejects the apparently impossible type of client. This would enhance its image as a successful agency in dealing with a particular problem. The failure is obviously that it deals with only a small portion of that problem since it rejects the more problematic clients.

Gate keeping decisions have several consequences for clients. First, some agencies attempt to demonstrate the need for their service or legitimize their service and quietly solicit clients to apply for service. The impact of this type of solicitation is that clients often are encouraged to apply for service when the organization is unable to meet any further demands from the community. The organization can use this 'increased demand' for services as demonstration of its need to exist and its need for additional resources in meeting this problem. The impact on the client is that he is encouraged to apply for service which at this point in time is not available to him. This may generate frustration and anger in the applicant.

A second impact that agency gate keeping decisions has on clients is where an organization lacks clients and as a result becomes less selective in the

types of clients it accepts. Gradually, as it builds a clientele, it develops more rigid guidelines as to the type of client that it will accept. The process of developing more stringent acceptance criteria may create frustration and confusion in the clients. As a result, through a process of gradually building a demand for services, the agency can gradually up its criteria for acceptability to the program. Clients who are less desirable will soon find that they are without service or that service is denied them.

A third consequence of gate keeping decisions is that the public may develop negative attitudes towards an agency which appears to be accepting only clients who represent few risks of failure. Again, the agency restricts its intake to those clients who appear to have the greatest likelihood of success. Clientele with more serious problems or the more difficult to work with clients are denied service through the selectivity of this particular agency.

Gradually agencies specialize and as specialization occurs, the gate keeping decisions are refined to weed out only those clients who do not fit the specific or specialized function of the agency. The danger is that through a process of specialization programs become fragmented by being so specialized that only part of the problem is dealt with. The process of specialization results in a process of redefining admittance criterias and establishing a new set of carefully defined gate keeping procedures to define the appropriate and inappropriate clients.

Finally, gate keeping decisions may create strain on professionals and professional ethics as the decisions become more restrictive. Role strain

occurs when professionals are forced to make decisions based on gate keeping criteria which are contrary to their beliefs as to the needs of service for clients. What happens as an organization attempts to control the demand for its services is that additional pressure is placed on its professional staff who are forced to make gate keeping decisions which are contrary to their professional beliefs.

Nagi's description of gate keeping decisions is an important consideration in an evaluation project. The evaluation of outcomes should consider the criteria which are used to accept or reject clients for services. A highly successful program may in fact be highly successful simply because of its selectivity in providing services. By selecting only those clients that are extremely motivated the agency will be able to improve its image as a success. Thus, evaluations looking at an agency should consider what gate keeping decisions are made about the services that an agency supplies and how its clients are selected.

These articles raise a number of issues for the Children's Foundation. The questions of gate keeping decisions, successes or failures of treatment and the generalization of behaviour modification across environments all affect the follow-up study which the Foundation is interested in conducting. In addition the literature on single-subject design supports some of the previous arguments for this level of data analysis at the Foundation. All of these factors affect the outcome studies of the Children's Foundation and must be considered in the analysis of the Children's Foundation data. The degree to which the Children's Foundation evaluation project addresses these issues will determine the degree to which the evaluation project maintains

its internal and external validity in assessing the effectiveness of the program at Children's Foundation.

FOOTNOTESCHAPTER IVC. Literature Review for Case Record Material

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D. Analysis of the Case Record Data

As indicated in the Plan of Analysis of Case Record Data section of this research project the analysis of the Children's Foundation data is presented by unit or Cottage. The identity of the three Cottages are in fact obscured from the general public as are the particular cases to provide maximum protection of the confidentiality of each client treated by the agency. The agency, however, has been provided with a code sheet which enables it to decode the identities of each of the Cottages and each case to enable agency staff to further develop case studies on each individual Cottage or case.

The analysis by Cottage takes into account the variations in staffing in the units, variations in therapeutic milieus, and the simple structural differences between the units. This analysis also separates single parent and two parent families as this represents yet another distinctive variation in the data. The individual case studies are presented in the Appendices to this report while the analysis of the case record data presented here only provides the analysis of the material by parental group or Cottage group.

mother. Similarly, the initials "FA" represent the responses of step-fathers, adoptive fathers, natural fathers or even live-in boyfriends. As a result this researcher cautions readers in interpreting this data. It is important to remember that the terms mother and father are used in the generic sense only to identify the sex of the respondent and the role that the respondent plays in the family.

The next two columns on the Case Record Data chart provide the information about the questionnaire number and the sum of ranks for each of the probes. By reading across the page it is possible to identify trends in the data by looking at the questionnaire number and noting the scores at each of the probes, probes one, two, three and four. This provides some indication of improvement in the child's performance according to the parents' perceptions between the first and third or fourth probes. This method of presentation allows the reader to identify trends in the data by looking across the sum of ranks for each probe.

The last four columns deal with the Friedman results and their statistical interpretations. The fifth column provides the exact Friedman results for each of the questionnaires. An asterisk in this column indicates that the results obtained through the Friedman test are insignificant. The next column, degrees of freedom, is important only for the first questionnaire. Since the first questionnaire has twelve rows, the results obtained on this questionnaire must be interpreted by referring to the regular chi-square distribution. As a result, the interpretation of the chi-square table requires a consideration of the number of degrees of freedom in the results. Normally the Friedman test does not require a researcher to consider the

As a result, this particular section of this research project provides the following analyses:

1. Analysis by Cottage
 - a. Comparative analysis by parent group
 - b. Comparative analysis by Cottage group
2. Comparative Analyses
 - a. Comparative with other Cottages
 - b. Comparative analysis with pre-test data

To present the data collected through the evaluation project, this researcher developed the chart entitled Case Record Data. This chart provides a summary of the information on each Cottage complete with the statistical data for each case. The first column of this chart identifies the case number of the particular case in question. This number is, in fact, the number assigned to the case by this researcher.

The second column presents the family size, which in fact reflects whether the family is a one parent or two parent family. In this column it is important to note that the initials "MO" and "FA" represent the relationship of the family member to the child. "MO" refers to the mother's responses while "FA" refers to the father's responses. The terms mother and father are generic terms as indicated earlier in this research project and do not reflect the real biological relationship of the individual to the child. These terms are used to reflect the sex of the respondent and not the actual relationship of the respondent to the child. For example, in the case of "MO" the responses could be those of a step-mother, natural mother or adoptive

degrees of freedom since the charts work strictly on the number of columns or rows being compared.

The next column reports the exact probability of the Friedman test as read from either the chi-square table or the Friedman table, both of which are provided in Appendix 13 of this research project. The final column provides the results necessary in order for the Friedman test to be significant at a probability level of .20.

The figures in this last column on the Case Record Data chart provide the actual Friedman result that would have been necessary in order for the Friedman test to have been significant at .20 level of probability or the closest level of probability available from the Friedman tables. The footnotes at the bottom of the page provide the exact scores necessary for the various probabilities. These figures, then, indicate the results required of the Friedman test in order to maintain a probability of approximately .20. For the purposes of this research project, the results are considered significant only if the probability is .20 or better. This researcher opted for this higher probability to attempt to minimize the type I and type II errors and to increase the power of these analyses.

As an example of how to use this chart, this researcher has provided the results for a sample case - Case A. Column 1 provides the case number which in this particular example is Case A. The second column indicates that this is a one parent family with the mother as the head of the household, indicated by the number 1 and the letters "MO". The third column identifies the questionnaire to which the results in the following columns

TABLE I

CASE RECORD DATA - SAMPLE

1	2	3	4				5	6	7	8	
CASE NUMBER	FAMILY SIZE	QUESTIONNAIRE NUMBER	PROBE 1	PROBE 2	PROBE 3	PROBE 4	FRIEDMAN RESULTS	DEGREES OF FREEDOM	PROBABILITY	χ^2 @ .05p/ χ^2 @ .01p	
A	1 MO	1	14.5	21.5			4.8	1	.05	1.642	(1)
		2	5	4			.08*		1.00	4.667	(2)
		3	6	9			1.8*		.522	3.6	(3)

relate. Consequently, Questionnaires 1, 2 and 3 refer to the questionnaires on behaviour, parental attitudes and the child's feelings about himself.

In Case A, for example, it is possible to see that the sum of ranks for Probe 1, Questionnaire 1, is 14.5 and the sum of ranks for Questionnaire 1, Probe 2, is 21.5. Thus, this table indicates that between the completion of Questionnaire 1 at intake and the completion of the same questionnaire at transfer to Access or Probe 2, the sum of ranks has increased from 14.5 to 21.5. Probes 3 and 4 are blank, indicating that they are not available on this particular family.

Column 5 has a figure, 4.8, in it which indicates the score for the Friedman test for this particular case. As a result, it is possible to see that the Friedman test in this particular case produced a result of 4.8 with 1 degree of freedom, which is indicated in Column 6. The seventh column provides the actual probability of the Friedman results obtained for Case A which, in this particular case, is .05. Thus, in this particular case, the

difference between the sum of ranks at Probes 1 and 2 are significant at the .05 level of probability.

The final column, Column 8, provides the figure that would have been necessary for this particular test to be significant at 1 degree of freedom with the probability of .20p. For example, in this case the Friedman results would have had to have been 1.642 to be significant at a probability of .20p. In this case, since the results are 4.8, it is possible to see that the results are significant beyond the .20p level of probability and are in fact significant at the .05 level of probability. As a result it is possible to conclude that in this particular case the difference between the sum of ranks for Questionnaire 1 are significant and represent a significant change from Probe 1 to Probe 2.

When the same case is analyzed for Questionnaire 2, the sum of ranks for Probe 1 is 5 and for Probe 2 is 4. By looking at the fifth column it is possible to see that in this particular case the result produced a Friedman score of .08, which is insignificant, indicated by the small star behind .08. The degrees of freedom in Column 6 is blank since it does not affect this particular test. Column 7 indicates that the probability of obtaining similar results at Probes 1 and 2 is 1.0. Finally, the eighth column indicates that a Friedman score of 4.667 would have been necessary for these results to be significant at the .194 level of probability. Consequently, it is possible to conclude in this case that the results obtained from this second questionnaire are insignificant and could have occurred by chance alone due to the high probability of the same results occurring by chance.

The figures at the extreme right of the Case Record Data chart refer to the footnotes at the bottom of the page which provide the specific results necessary in order to obtain significant results at the .20 level of probability, or the closest proximity to that probability from the Friedman charts. As a result, by comparing the eighth and fifth columns, it is possible to see how far the Friedman results obtained for each case were from the level of significance. Again, in the case of Case A, the results indicate that according to Column 8, a Friedman score of 4.667 would have been necessary for the results to be significant at the .194 level of probability (obtained from the footnotes). By comparing this column with Column 5, it is possible to see how far from significance the results obtained by this particular parent were. In other words, the comparison between 4.667 and .08 indicate an extreme difference between these scores and the score necessary to obtain significant results for the Friedman test.

This Case Record Data chart is a useful chart in summarizing all the cases involved in this particular project. It provides a summary of the results which can be used for quick comparison for each case. As a result, at the beginning of each Cottage analysis the chart is included to assist in examining the data collected by the agency.

This researcher decided to adopt a method of presenting the data analysis which is of assistance to both the Children's Foundation and the reader. The results are analyzed at a single case level and placed in the Appendix to this research project. The purpose of placing this analysis in the appendices was to facilitate the presentation of the overall trends in the

data collected by the Children's Foundation staff. The results are analyzed by Cottages which allows this researcher to make comparisons between the Cottages and comparisons between parental groupings. As a result, this research project presents both a single-case analysis of each case and a group analysis for the cases by Cottage. Both of these analyses are useful to the clinicians at Children's Foundation in reviewing their results.

A final analysis is provided in which the results obtained by this researcher are compared with the initial pre-test results obtained by the evaluator when he was designing the evaluation instruments. This final analysis provides a basis for comparison between the results obtained by the analysis of this data and the analysis obtained by the agency evaluator.

1. Analysis by Cottage: Cottage 1

Cottage 1 had a total of fifteen cases which were selected for study by this researcher. Of these fifteen cases, ten cases were of single parent families and five cases involved two parent families. In two of the single parent cases, only two probes were available for Cases 1 and 2. Cases 3 and 4 on the other hand, had three probes available, however some data was missing for each of these cases. In Case 3, Probe 3 was missing and yet a follow-up probe, or Probe 4, was available. As a result, it is possible to speculate at the change in behaviour between Probes 2 and 4, but such speculation is unreliable since Probe 3 is not available for study. In Case 4, Probe 2 is missing so that once again this researcher was forced to speculate at the trend that the data might show between Probes 1 and 3.

TABLE II

CASE RECORD DATA: SINGLE PARENT FAMILIES

Cottage 1

Case	Family Size	Questionnaire Number	Scale 1	Scale 2	Scale 3	Scale 4	Friedman Residuals	Degrees of Freedom	Probability	$\chi^2 @ .20p / \chi^2 @ .10p$	
1	MO	1	13	23			8.33	1	.01	1.642	(1)
		2	4	5			.33*		1.00	4.667	(2)
		3	6	9			1.8*		.522	3.6	(3)
2	MO	1	14	22			5.33	1	.02	1.642	(1)
		2	4	5			.33*		1.00	4.667	(2)
		3	7.5	7.5			0*		1.00	3.6	(3)
3	MO	1	18.5	22.5		31	6.79	2	.05	3.219	(1)
		2	3.5	9		5.5	4.71		.194	4.667	(2)
		3	10	11.5		8.5	.90*		.691	3.6	(3)
4	MO	1	12		33	27	19.5	2	.001	3.219	(1)
		2	4		8	6	2.67*		.361	4.667	(2)
		3	10.5		8	11.5	1.30*		.691	3.6	(3)
5	MO	1	23	29.5	19.5		4.292	2	.15	3.219	(1)
		2	7.5	7	3.5		3.17*		.361	4.667	(2)
		3	11.0	7.5	11.5		1.90*		.522	3.6	(3)
6	MO	1	14.5	27.0	30.5		11.79	2	.01	3.219	(1)
		2	3	6.5	8.5		5.17		.194	4.667	(2)
		3	8	9.5	12.5		2.099*		.522	3.6	(3)
7	MO	1	12.5	29.5	30.0		16.54	2	.001	3.219	(1)
		2	3	8	7		4.67		.194	4.667	(2)
		3	9.5	8.0	12.5		2.10*		.367	3.6	(3)
8	MO	1	27.5	25.5	19.0		3.29	2	.20	3.219	(1)
		2	8.5	6.5	4		7.5		.028	4.667	(2)
		3	9.5	8.5	12.0		1.3*		.691	3.6	(3)
9	MO	1	27.5	19	25.5		3.29	2	.20	3.219	(1)
		2	3	7	8		4.67		.194	4.667	(2)
		3	11	9	10		.40*		.954	3.6	(3)
10	MO	1	16	31	25		9.5	2	.01	3.219	(1)
		2	3	8	7		4.67		.194	4.667	(2)
		3	10.5	10.5	9		.30*		.954	3.6	(3)

Footnote.

@ 1 degree of freedom = 1.642 @ .20 p

1. CHI-SQUARE @ 2 degrees of freedom = 3.219 @ .20 p

@ 3 degrees of freedom = 4.624 @ .20 p

2. Friedman two-way analysis of ranks 4.667 @ .194 p

3. Friedman two-way analysis of ranks 3.6 @ .182 p

* insignificant

TABLE III

Cottage 1

CASE NUMBER	FAMILY SIZE	QUALIFICATION NUMBER	TRIAL 1	TRIAL 2 (Sum of Trials)	TRIAL 3	TRIAL 4	SCORE IN TRIALS	SCORES OF FAMILY	PROBABILITY	χ^2 1 d.f. / χ^2 2 d.f.
11	2 FA	1	14.5	21.5			4.8	1	.05	1.642
		2	5	4			.08*		1.00	4.667
		see below								
	MO	1	14	22			5.33	1	.02	1.642
		2	3	6			2.99*		.361	4.667
		3	6	9			1.8*		.522	3.6
12	2 FA	1	16.5	19.5			.75*	1	.50	1.642
		2	4	5			.33*		1.000	4.667
		see below								
	MO	1	13	29	30		15.17	2	.001	3.219
		2	4	8.5	5.5		3.50*		.361	4.667
		3	8.5	12	9.5		1.3*		.522	3.6
13	2 FA	1	25	29.5	17.5		6.12	2	.05	3.219
		2	4	8	6		2.667*		.361	4.667
		see below								
	MO	1	15	34	22.5		3.27	2	.20	3.219
		2	3.5	6.5	8		3.49*		.361	4.667
		3	6	13	11		5.20		.093	3.6
14	2 FA	1	21.5	19.5	31		6.29	2	.05	3.219
		2	4	5	9		4.67		.194	4.667
		see below								
	MO	1	16	25.5	30.5		19.62	2	.001	3.219
		2	9	4.5	4.5		4.50		.194	4.667
		3	9	10.5	10.5		.3*		.954	3.6
15	2 FA	1	13.5	32.5	26		15.54	2	.001	3.219
		2	5.5	8	4.5		2.17*		.528	4.667
		see below								
	MO	1	14	28	30		12.67	2	.01	3.219
		2	5	7.5	5.5		1.67*		.528	4.667
		3	8	7.5	14.5		6.10		.039	3.6

Footnote.

- @ 1 degree of freedom = 1.642 @ .20 p
 1. CHI-SQUARE @ 2 degrees of freedom = 3.219 @ .20 p
 @ 3 degrees of freedom = 4.624 @ .20 p
 2. Friedman two-way analysis of ranks 4.667 @ .194 p
 3. Friedman two-way analysis of ranks 3.6 @ .182 p

* insignificant

Once again, this speculation is unreliable, since the data do not support any conclusions reached on the basis of this case. The remaining six cases all had three probes available for each case, each one ending with Probe 3. As a result it is possible to analyze these particular cases more fully.

The remaining five cases for Cottage 1 consisted of two parent families in which some data was missing on Cases 14 and 15. Case 14 had only two probes available for each parent, Probes 1 and 2. Case 15, however, had only two probes available for the father, Probes 1 and 2, while the mother managed to complete a third probe. The remaining three cases had probes available on both parents at Probes 1, 2 and 3 stages in the intervention with the family. As a result, these three cases were more useful in the analysis of the data.

a. Comparative Analysis by Parent Group

i. Single Parent Families

Parental Perceptions of Behaviour

The questionnaire relating to the parents' observations of the child's behaviour all show remarkably similar trends. In eight of the ten single parent cases on which data are available, the parents indicate an improvement in their child's behaviour between the initial probe at intake and the probe completed at the transfer to Access point in the intervention. In the remaining two cases, the parents reported a deterioration in their child's behaviour between the time they completed the first probe at intake and the time they completed the second probe at the transfer to Access point.

All of these questionnaires produced significant data to demonstrate that the parent observed change in the child's behaviour between the time the child was admitted to the Children's Foundation and the time the child was ready to be transferred to the Access program and returned home.

In one of the two cases where the child's behaviour deteriorated during the initial phase of treatment, the child's behaviour continued to deteriorate all the time that the family had contact with the Children's Foundation.

In the second case where the parents reported a deterioration in their child's behaviour during the time that the child was a resident of Children's Foundation, the parents reported an improvement in the child's behaviour once the child returned home.

Case 8 represents the case in which the child's behaviour continued to deteriorate throughout the contact the family had with the Children's Foundation. On the other hand, Case 9 represents the case where the child's behaviour improved after an initial deterioration in the child's behaviour during the time that the child was in residence at the Children's Foundation.

When the study of the data is extended to consider the third and fourth probes as available, a number of interesting trends occur. In Cases 1 and 2, probes beyond Probe 2 were not available so that no trends were observed in these particular cases. In Cases 3 and 4, however, probes were available at the follow-up stages. In Case 3 the behaviour appeared to improve from Probe 2 to Probe 4. However, this is only speculative since Probe 3 is missing and it is uncertain what type of behaviour might have been observed during the time period between Probes 2 and 4 had the

child and family completed the third probe at discharge. In Case 4, a totally different trend is observed in which the behaviour deteriorates from Probe 3 to Probe 4 or between discharge and the six month follow-up probe. This appears to reflect a deterioration in the child's behaviour, according to the parents' perceptions, after the child and the family had no further contact with the Foundation. In this case the data is somewhat sketchy since Probe 2 is also missing. However, it appears that an improvement occurred between Probes 1 and 3 in which the problematic behaviour decreased and the sum of ranks increased over this time period.

For the remaining six cases, a variety of observations are possible. Cases 5, 8 and 10 demonstrated a marked deterioration in the child's behaviour after the completion of the transfer to Access probe and at the completion of the discharge probe. During this time period the parents reported a deterioration in the child's behaviour while the child was living at home and the parents continued to have contact with the agency through the Access program. Case 5 and Case 10 represent similar types of patterns in which the child's behaviour improved during residence at the Foundation but deteriorated after discharge. Case 8, on the other hand, demonstrates a continual deterioration in acceptable behaviour from the initial contact with the Foundation through to discharge from the Foundation.

Case 6 demonstrates a continuing improvement in the child's behaviour from Probes 1, 2 and 3 with a reduced rate of improvement between Probes 2 and 3, or between the transfer to Access and the discharge probes. Case 7 reflects an almost negligible change in behaviour between Probes 2 and 3, while the change in behaviour between Probes 1 and 2 is decidedly marked.

Finally, Case 9 represents one of the two anomalies in that the child's behaviour apparently deteriorated after admission to the Foundation, but began to improve once the child was returned home and transferred to the Access program. Case 8, which has already been described, indicates that the child's behaviour continued to deteriorate throughout the contact that the family had with the Children's Foundation.

As a summary, it is possible to say that in eight of the ten cases behaviour improved between intake and transfer to Access with only two cases showing deterioration in the child's behaviour during this time period. Once a child is transferred to Access, the results become more confusing. In eight of the cases on which data are available, four show a decline in positive behaviour between the Access probe and the discharge probes, while the remaining four show an increase in positive behaviour between these two probes. In the four cases showing decrease in acceptable behaviour, the trends are very pronounced. Of the four cases showing an increase or continuing increase in positive behaviour, three show slight to moderate increases in this type of behaviour while the fourth shows a remarkable increase in positive behaviour.

In interpreting these results, this researcher cautions that only six of the ten cases had three probes available for analysis. In these six cases significant statistical results were obtained for all cases. When these six cases are considered in isolation the following trends are observable. Four cases report an improvement in the child's behaviour during the time that the child is in residence at the Children's Foundation. The remaining two cases report a deterioration in the child's behaviour during the same

time period. When the transfer to Access occurs, two of the cases that reported an improvement in the child's behaviour while at the Children's Foundation report a deterioration of the child's behaviour between the transfer to Access probe and the final discharge probe. A third case reports the continued deterioration in the child's behaviour. Finally two cases which reported initially improved behaviour continue to report an improvement in the child's behaviour. Case 9, on the other hand, which reported a deterioration in the child's behaviour during the time that the child was a resident at Children's Foundation reports an apparent improvement in his behaviour once the child is returned home and the family is transferred to the Access program. As a result the overall results for these cases indicate that only two of the six cases maintained a continuous pattern of improved behaviour, while two demonstrated a pattern of improved behaviour until the transfer to Access occurred and one case demonstrated a continual deterioration in behaviour. The final case showed a decrease in acceptable behaviour followed by an increase in acceptable behaviour after transfer to Access occurred.

Parental Perceptions of Self

In the ten single parent families available for analysis with this Cottage, six of the cases produced significant statistical results for the parenting scores. Of the ten cases, eight showed an increase in parenting scores between Probes 1 and 2, while the remaining two cases showed continual decrease between the parenting scores at Probe 1 and those at Probe 2.

For the cases on which data was available after Probe 2, the parenting scores show disquieting trends. Six of the eight parents showed a decrease

in their responses to the parenting questions. This seems to indicate that parents were feeling less confident and less secure about their roles as parents once the family was reunited, the child returned home and the family was only seeing the family counsellor at the Children's Foundation through the Access program. In the remaining two cases, the parents reported an improvement in their feelings of self confidence during the transfer to Access and discharge probes.

Both parents who reported an increased sense of ability or self confidence to parent produced significant statistical results. In addition, three of the remaining four parents on whom three probes were available produced statistical results which were also significant. Consequently, only one of the six parents who completed three probes provided data which was not statistically significant. As a result the changes reported by the parents in their feelings about their parenting abilities are significant and these results could not have been obtained through chance alone.

Child's Perception of Self

In all of these cases the third questionnaire did not produce a single statistically significant result. Consequently, any of the trends observed in the children's scores are only matters of speculation. In some cases, trends appear to coincide with trends in the parents' behaviour and in other cases the child's self-concept seems to improve inversely with the parents' sense of their parenting roles. Since these results are not statistically significant, it is not possible to conclude that any significant trends or improvement in the child's self-concept occurred for any of the children at the Children's Foundation.

It is also important to make comparisons between the attitudes of the parents about their parenting skills, their views of the child's behaviour and the child's view of himself with the single case families. In the eight of ten cases where the parents reported an improvement in the child's behaviour between Probes 1 and 2, seven of the parents also reported an improvement in their self esteem about their parenting roles. Similarly three children reported an improvement in their own self-concept between Probes 1 and 2. Two children on the other hand reported no change in their self-concept between Probes 1 and 2 and the remaining five children reported a deterioration in their self-concepts between Probes 1 and 2. Consequently a significant trend appeared to indicate that between Probes 1 and 2 where the parents report an improvement in the child's behaviour the child's self esteem seems to deteriorate. This occurred in three of the eight cases whereas in two others no change apparently occurred in the child's self-concept. Again this reseracher must caution that these trends are at best tentative since none of the child questionnaires in this particular Cottage were statistically significant.

When the examination is extended to include Probes 2 to 4, different trends occur. For the eight families on which these probes are available, three report a continued improvement in the child's behaviour, two report a deterioration in their child's behaviour between Probes 2 and 3 while a third reports a deterioration in the behaviour between probes 3 and 4. One case reports continuing deteriorating behaviour in their child while the last case reports a reversal in the deterioration in their child's behaviour once the child was returned home. In this case, Case 9, the child's behaviour apparently improved once the child returned home.

When these trends are compared with the parental and child trends, interesting comparisons occur. For Case 3 where the parents report a continued improvement in their child's behaviour both the parenting scores and the child's self worth scores drop after the transfer to Access occurs. In Case 6, however, where behaviour continues to improve across time, both the parenting and child's scores also improve across time. As a result these two cases demonstrate opposite trends, where one demonstrates an initial improvement followed by deterioration and one reports continued improvement. For comparison Case 7 reports a continual improvement in the child's behaviour across three probes but a divergent pattern in the data on the child and parenting scores. Initially the child's self-concept drops between Probes 1 and 2 when the parent reports an increase in their parenting behaviour. Once the Probes 2 and 3 are compared, however, the child's self-concept improves while the parenting scores deteriorate. Interestingly enough it seems that in this particular case as the child experiences a more assertive parent, perhaps, his own self-concept deteriorates but once the child's self-concept improves the parenting scores decrease. The most typical pattern for the child's scores is a period of deterioration between Probes 1 and 2 and a period of improvement between Probes 2 and 3 or 3 and 4. Five cases in fact demonstrate this trend. The significant trends in the parent data on the other hand demonstrate a trend towards improvement during the first time period while the child is in residence at the Children's Foundation followed by a period of deterioration after the child is returned home. This trend is observed in four of the eight cases. Two of the cases report a continuing deterioration in parenting feelings about parenting and the remaining two report a continual improvement in their feelings about parenting.

As a result, it appears from examining these cases that the trends tend to contradict themselves in many of these cases. Improvement in the parents' views of the child's behaviour and their views of their self esteem as parents seem to counter the trends in the child's perceptions of self. While a number of cases demonstrate that parents and behaviour tend to improve over time, it appears that the child's self-concept in fact deteriorates at least initially during the phase that the child is in Children's Foundation. As a result, the data suggests that children tend to experience this loss of self esteem during the time that they are in Children's Foundation while parents experience an improvement in both behaviour and their own sense of their skills and abilities as parents. Once the children are discharged, however, the trends seem to reverse. When the child is returned home and the family transferred to the Access program, the parents seem to experience a deterioration in their sense of their abilities as parents while the child experiences an increase in his perceptions of self worth and self confidence. Similarly, the behaviour tends to deteriorate at this point with regularity.

For the ten children in single parent homes five children reported a deterioration in their self-concept between the completion of the intake probe and the transfer to Access probe. Two children reported no change at these two points in time, while the remaining three children reported an improved sense of self-concept between these two probes. For one of these cases in which the child reported a deterioration in his self-concept, it is important to note that the second probe is missing so that the actual trend in the data between Probes 1 and 3 is speculation on the part of this researcher.

When the analysis of the data is extended to consider the probes after the transfer to Access occurred a number of the trends change. Initially Cases 1 and 2 did not have probes available after the transfer to Access occurred so that no data was available for analysis on these cases. Case 3 on the other hand had the follow-up probe available but was missing the discharge probe. Once again, the results of this probe are speculative since the data at the time of discharge is unavailable. However, on the basis of this speculation the child reported a deterioration in his self-concept between the completion of the transfer to Access probe and the completion of the follow-up probe. Case 4, on the other hand, was missing Probe 2 but completed Probes 1, 3 and 4. When the data is examined for the time period between Probes 3 and 4 the child reports an increased sense of self-confidence for these two probes. As a result, in this particular case it appears that the child's self-concept improved once he was discharged from the Children's Foundation.

The remaining six cases all have three probes available for analysis. Of these six cases four of the cases reported an initial deterioration in the child's self-concept between the intake and transfer to Access probes. When the time period between the transfer to Access probe and the discharge probe is examined a number of changes occur in the child's behaviour. In Cases 3, 7, 8 and 9 the child reported an improved sense of self-concept after an initial deterioration in that self-concept during the time period that the child was a resident of Children's Foundation. Consequently these four cases reported an initial deterioration in the child's feelings of self confidence followed by an improvement in those feelings once the child was discharged from Children's Foundation. In Case 10 the child initially reported no change in his feelings of self-concept during the time he was resident at Children's Foundation, but reported a deterioration in his feelings after the transfer to Access occurred. Finally, in the case of Case 6, this child reported a continued sense of improvement of his self-concept. This is the only case of the six children examined that reported a continual improvement in his self-concept across all three probes.

Again this researcher must caution that these results are very tentative since none of the results are statistically significant. Consequently the trends that are observed in the data could have occurred by chance alone. As a result, the trends may be reflecting chance responses from the children and not be significant at all.

ii. Two Parent Families

Parental Perception of Behaviour

The ten parents that compose this sample from five different families all

reflected an improvement in the child's behaviour between Probes 1 and 2 with the exception of the father in Case 12. However, once the probes are extended beyond Probe 2, the trends become more confusing. Of the seven parents on which data is available after Probe 1, three parents report a decrease in the level of acceptable behaviour while four parents show anything from slight to rapidly increasing improvement in the child's behaviour. As a result the parents are split with three reporting deterioration in the child's behaviour and four reporting improvement.

Of the statistical tests run on these particular cases, nine of the ten parents produced results which were statistically significant indicating that chance cannot be used to explain the differences in these trends. In addition, a number of cases were statistically significant well beyond the .20 level of probability initially set by this researcher as an acceptable level of probability in these cases. Consequently it is possible to conclude that these parents reported significant changes in their child's behaviour during this time period.

In the cases which showed a deterioration in the level of acceptable behaviour after transfer to Access occurred, two of the cases demonstrated a deterioration in the behaviour which stopped above the previous low level of acceptable behaviour reported at intake. The third case represented a rapid deterioration in the child's behaviour which plunged the sum of ranks well below the initial intake level. Consequently in this third case it appears that the child's behaviour not only deteriorated after discharge from the program, but deteriorated to a point that it was worse after transfer to Access than it was prior to the family coming to

the Children's Foundation.

Initially comparing the parents' responses for each case, the parents agreed that the child had made significant improvements in his behaviour in five of the cases between the initial probe and the transfer to Access probe. In Case 12, however, the mother and father disagreed with the degree of change in the child's behaviour. The father responded showing a decrease in the level of acceptable behaviour between intake and transfer to Access probes, while the mother records a significant increase in the level of acceptable behaviour. When the cases are compared across time it is possible to see that in three cases in which three probes were available, the parents generally tend to agree on how the child is behaving after transfer to Access. In Case 11, for example, both the mother and father agreed that the child's behaviour deteriorated once the child was transferred to Access. In Case 12, the mother and father once again agreed that the child's behaviour improved after transfer to Access occurred and the child returned home, although these two parents disagreed about the child's behaviour during the initial time that the child was a resident at Children's Foundation. In Case 13, however, confusing statistical trends occurred. The father reported a deterioration in acceptable behaviour while the mother reported a moderate improvement in the child's behaviour between transfer to Access and the follow-up probe. As a result, both these parents agreed the child's behaviour initially improved but disagreed about how the child behaved once the child was returned home.

In summary, for those seven parents on whom three probes were available, three parents reported a continual trend of improvement in their child's

behaviour across the three probes. Three parents reported an initial improvement of their child's behaviour during the time the child was a resident at Children's Foundation and a deterioration in the child's behaviour once the child was returned home and transferred to the Access program. The seventh parent reported an initial deterioration in the child's behaviour during the time that he was a resident at the Children's Foundation followed by an improvement in his behaviour once he was returned home.

Parental Perceptions of Self

Generally the ten parents who responded to the questionnaire on parenting attitudes and feelings about parenting reported an improvement in their feelings about parenting. Nine of the ten parents reported that their feelings about their effectiveness as parents improved. In Case 14, the father responded reflecting a decrease in his sense of achievement or effectiveness as a parent.

On those cases where probes were available for the discharge period, four parents reported a decrease in their sense of effectiveness as parents, two parents reflected a continuing increase in their confidence as parents while one parent showed no change between the transfer to Access and discharge probes. As a result this raises a number of questions about the type of services that these families received at the Children's Foundation after the child was transferred to Access. The results are not entirely favourable, indicating that the parenting program maintained through the Access program managed to keep these parents feeling comfortable about their overall parental functioning. Only two of the seven parents reported a

continual improvement in their feelings about their parenting skills. Four parents reported an initial improvement in their feelings about their parenting skills followed by a deterioration in those feelings. A final parent reported an initial deterioration in their feelings about their parenting skills followed by a period of no change. The trends in those parents who initially reported an improved sense of parental skill and ability followed by a deterioration suggests that the parents coped well when the child was in the Children's Foundation but once faced with dealing with the child at home experienced a lack of self confidence in being able to cope with the child's behaviour at home. Consequently these four cases suggest that a honeymoon period exists for these parents when they are not having to deal with their child, but when the reality of the responsibility of dealing with their child comes home with the child, these parents lose their sense of self confidence and ability to deal with that particular child and his behaviour.

Child's Perceptions of Self

Of the two parent families, the children's responses to the questions around self esteem produced only one statistically significant result. In this case, Case 13, the child's feelings about his self confidence appear to improve drastically between Probes 2 and 3 once he had returned home. In the remaining cases the child's self-concept appeared to improve between Probes 1 and 2 as a routine observation. Once again, it is important to note that these are merely speculative statements since none of the results were statistically significant other than in Case 13.

Four of the five children reported an increased sense of self esteem during the time period that the child was in residence at the Children's Foundation. The fifth child reported no change in his sense of self confidence during this time period. Once the child was transferred to Access, the difference between Probes 2 and 3 on the four cases for which these probes are available demonstrate confusing trends. Case 15 and Case 11 show the child's self-concept plummeting somewhat during the transfer to Access - discharge stage. Case 12 shows the child's self esteem remaining constant and Case 13 shows the self esteem of the child increasing rapidly. Again these trends are merely speculative since the results are not statistically significant.

Generally comparing the trends between the parents in these two parent families it is possible to observe that the parents generally agree on the observations of their child's behaviour. In Cases 14, 15, 11 and 13 the parents agreed that the child's behaviour improved between the intake and transfer to Access programs. In Case 12, one out of the five cases, the father and mother disagreed on the child's behaviour between these two probes.

When the parents' responses to the parenting questionnaires are compared with their observations of their child's behaviour, the responses seem to co-vary in the same direction. In Case 14, the father's sense of parenting declined while his record of the child's behaviour reflected an increase in the acceptable behaviour. On the other hand, the mother's assessment of her child's behaviour and her assessment of her parenting skills both increased in this case. In Case 15, the father and mother showed increases in the child's acceptable behaviour and increases in

their feelings of effectiveness as parents between Probes 1 and 2. In Probe 3 the mother reflected a decline in her parenting confidence coupled with a slowing off or levelling off of the improvement in the child's behaviour. Significantly in this case the child's self esteem also seemed to take a drop after transfer to Access occurred.

In Case 11, the father's assessment of his child's behaviour and his parenting roles both increased from Probes 1 to 2 and decreased from Probe 2 to 3. The mother, on the other hand, showed a steady increase in her parenting skills while she judged the child's behaviour to deteriorate after transfer to Access. Here, the child's self-concept improved during the time that the child was a resident at Children's Foundation, between Probes 1 and 2, and began to drop off after the child was returned home and transferred to Access.

In Case 12, the father reported a continuing increase in his assessment of his skills as a parent coupled with a slight decrease from Probe 1 to 2 in the child's acceptable behaviour. This was followed by a substantial increase in the child's acceptable behaviour between Probes 2 and 3. The mother, on the other hand, observed her child's behaviour continually improving over the three probes while her parenting skills appear to drop from Probes 1 and 2 and remain at the same level for Probes 2 and 3. In this case the child's self-concept improved initially and stabilized during the Probe 2 to 3 period.

Finally, in Case 13, the father's assessment of his child's improvement in behaviour and his own parenting skills appear to vary in similar patterns, increasing from Probe 1 to 2 and decreasing from Probe 2 to 3. In this

case the mother also observed an increase in the child's acceptable behaviour between Probes 1 and 2, and a gradual increase between Probes 2 and 3, coupled with her own sense of accomplishment between Probes 1 and 2 and a decreased sense of accomplishment between Probes 2 and 3. Again in this case the child's behaviour held steady between the first two probes and improved between Probes 2 and 3 to such a degree that the results were statistically significant.

A significant trend across all these cases is that the child's self-concept did not seem to vary according to any of the parents' assessments of their parenting skills. In a number of cases the child's self-concept varied inversely with the parents' responses on the parenting scales. For example, in Case 15 the mother and child varied similarly with the data increasing from Probe 1 to 2 and decreasing from Probes 2 to 3. In Case 11, however, the child's change in his estimation of his self-concept followed the father's pattern increasing from Probe 1 to 2 and decreasing from Probe 2 to 3. In Case 12, the child's self-concept scale followed that of the mother's from Probes 2 to 3 remaining substantially equal while it increased between Probes 1 and 2 where the mother's assessment of her parenting skills decreased. In Case 13, the trends were exactly opposite, where the child's sense of self esteem increased, the mother's and father's sense of their parenting skills decreased. Again, none of these trends are conclusive since the data for the child's scales are statistically insignificant. However, the trends are worth noting as they may lead to further investigations in some of these families.

b. Comparative Analysis by Cottage Group

It is now possible to examine the fifteen cases from Cottage 1 to determine what trends exist in the data.

i. Probe 1 - Probe 2 Time Period

Of the twenty respondents to this question, seventeen parents reported improvement in their child's behaviour during this time period. The remaining three parents reported a deterioration in their child's behaviour during the time that the child was a resident of Children's Foundation. Of the twenty parents who responded to this questionnaire on their own parenting skills, sixteen parents reported an improvement in their overall feelings about their skills as parents. The remaining four parents reported a deterioration in their perceptions of their parenting skills. Of these four parents, two were single parent mothers, one was a father in a two parent family and the fourth was a mother in a two parent family. The balance of the parents completed the questionnaire reflecting an increase in their positive feelings about parenting and their attitudes towards children and problem solving techniques.

Of the fifteen children completing the child's questionnaire, three children reflected a decrease in their self esteem between the first and second probes. In addition two children reported approximately equal feelings about their self esteem during this time period. This left ten children who reported an increase in their overall self esteem during this period of time. Again, this researcher cautions that these conclusions with regards to the child's results are tentative, since the statistical analysis

of these responses are not significant and therefore the trends cannot be relied upon.

ii. Probe 2 - Probe 3 Time Period

Those cases on which data is available between Probes 2 and 3 involve seven parents who report that their child's behaviour continued to improve after transfer to Access occurred through to the discharge probe. In addition, seven of the parents reported that their child's behaviour deteriorated after the transfer to Access occurred. This approximately equalizes the reports from the data on whether the child maintains his behaviour after transfer to Access or the behaviour reverts to that behaviour prior to the family involvement with the Children's Foundation.

In examining those cases for which parenting responses are available between Probes 2 and 3, nine parents of the fifteen on whom data is available report a decline in their positive feelings about their parenting role. Of the remaining fifteen parents, four show a continued increase in their sense of confidence as parents and one parent shows no change in her perceptions of her effectiveness as a parent between Probes 2 and 3.

On the children on whom data is available between these two probes, three children report a decrease in their sense of self confidence and seven show an increase in their sense of self confidence with one child remaining the same. Again the results for the child survey is inconclusive since the data on only one of the children provided statistically significant results. The remainder of the results could have occurred by chance alone.

As an overview to these fifteen cases it is important to note that in the behaviour scale out of the possible twenty parent responses, nineteen provided statistically significant results in reporting their perceptions of the child's behaviour. Only one parent's results were not statistically significant. In addition, in the parenting scales eight parents reported statistically significant changes in their attitudes and feelings about themselves as parents over the probes available. Finally, for the child's scale of the fifteen children involved in this study only one child produced statistically significant results indicating that the data collected on his behaviour could not have occurred by chance alone. As a result the behaviour scales in this particular Cottage produced a great deal of valuable data on the parents' parental perception of behaviour and the parents' perceptions of themselves as parents but no reliable data for the child perceptions of self.

2. Analysis by Cottage: Cottage 2

Cottage 2 had thirteen cases on which data was available for analysis. Of these thirteen cases, eight cases involve single parent families in which four cases had two probes available and four cases had three probes available for analysis. Of the remaining five cases involving two parent families, three of the cases had two probes available, one case had four probes available for mother and two probes for the father, and the final case had four probes available for both mother and father.

a. Comparative Analysis by Parent Group

Cottage 2

[illegible]

Footnote.

@ 1 degree of freedom = 1.642 @ .20 p

1. CHI-SQUARE @ 2 degrees of freedom = 3.219 @ .20 p

@ 3 degrees of freedom = 4.624 @ .20 p

2. Friedman two-way analysis of ranks 4.667 @ .194 p

3. Friedman two-way analysis of ranks 3.6 @ .182 p

* insignificant

TABLE V

CASE RECORD DATA: TWO PARENT FAMILIES

Cottage-2

Case No.	Family Type	Subject No.	Age 1	Age 2	Age 3	Age 4	Mean	SD	Chi-square	df	p-value
24	FA	1	16.5	28.0	27.5		17.6	2	.001		3.219 (1)
		2	7.5	4	6.5		2.17*		.528		4.667 (2)
		see below									
	MO	1	13	29	30		15.17	2	.001		3.219 (1)
		2	5	6	7		.67*		.944		4.667 (2)
		3	7	11.5	11.5		2.70*		.367		3.6 (3)
25	FA	1	16.5	26	29.5		7.54	2	.05		3.219 (1)
		2	5.5	5	7.5		1.17*		.944		4.667 (2)
		see below									
	MO	1	23	30.5	18.5		6.13	2	.05		3.219 (1)
		2	9	6	3		6.00		.028		4.667 (2)
		3	10.5	8.5	13.0		10.30		.00077		3.6 (3)
26	FA	1			22	14	5.33	1	.02		1.642 (1)
		2			4.5	4.5	.0*		1.00		4.667 (2)
		see below									
	MO	1	15	43.5	35	23.5	14.72	3	.01		4.642 (1)
		2	8.5	6.5	7	8	.50*		.944		4.667 (2)
		3	12.5	13	13	11.5	.18*		1.0		3.6 (3)
27	FA	1	21	25.5	25.5		1.13*	2	.50		3.219 (1)
		2	7	6	5		5.67		.01		4.667 (2)
		see below									
	MO	1	25.5	19.5	27.0		2.62*	2	.30		3.219 (1)
		2	7	5	6		.67*		.944		4.667 (2)
		3	8.5	9	12.5		1.9*		.522		3.6 (3)
28	FA	1	26	32.5	31	30.5	1.175*	3	.70		4.642 (1)
		2	9.5	8	9	3.5	4.5		.194		4.667 (2)
		see below									
	MO	1	22	25.5	35	37.5	8.274	3	.05		4.642 (1)
		2	5	9	6	10	3.4		.361		4.667 (2)
		3	9	12	17	11	6.78		.039		3.6 (3)

Footnote.

@ 1 degree of freedom = 1.642 @ .20 p

1. CHI-SQUARE @ 2 degrees of freedom = 3.219 @ .20 p

@ 3 degrees of freedom = 4.624 @ .20 p

2. Friedman two-way analysis of ranks 4.667 @ .194 p

3. Friedman two-way analysis of ranks 3.6 @ .182 p

* insignificant

i. Single Parent Families

Parental Perceptions of Behaviour

Cottage 2 had eight single parent families which this particular research project analyzed. Of these eight cases, four of the families had only two probes available and as a result are analyzed separately. The apparent trends in behaviour in these four cases show gradual improvement in the child's behaviour between the various probes. Three of these cases had Probes 1 and 3 available while the fourth case had Probes 1 and 2. Despite the missing data the trend towards improvement in behaviour was significant in three of these four cases, while Case 19 showed a gradual improvement in the sum of ranks over time, this data was not significant. Once again this researcher cautions that the interpretation of these results is particularly tentative since Probe 2 is missing in three of the four cases and the nature of the behaviour or the parents' view of behaviour while the child was a resident of the Children's Foundation is unavailable. As a result, this researcher has extrapolated from the probes available what the behaviour may have looked like across time.

The remaining four cases showed a variety of interesting trends in the data. On the questionnaires regarding behaviour, two of the four cases demonstrated an improvement in behaviour across all three probes while the remaining two cases showed a deterioration in behaviour after the child was transferred to Access.

In Cases 19, 16 and 17 Probes 1 and 3 were available for this particular questionnaire. In these three cases the parents reported an apparent

improvement in the child's behaviour between the completion of the initial probe at intake and the next probe available, the discharge probe. In two of these three cases the change in behaviour was statistically significant indicating that the results obtained through the completion of the probes could not have occurred by chance alone. Only Case 19 produced changes in behaviour which were not statistically significant. Case 18, on the other hand, a single parent father, had Probes 1 and 2 available in which the parent reported an improvement in his child's behaviour between Probes 1 and 2. This improvement in behaviour was statistically significant indicating that the parent identified the behaviour as improved to such a degree that the changes in behaviour reported by the parent could not have been obtained through chance alone.

Cases 20 through 23 all had three probes available for analysis. Cases 21 and 22 both reported an improvement in behaviour through all three probes. Cases 20 and 23, however, reported an initial improvement in behaviour during the time that the child was a resident at the Children's Foundation followed by a deterioration in behaviour once the child was transferred to Access and returned home. As a result for these four cases the trends in each case are exactly opposite once the child was returned home to the parent and the family dealt with through the Access program. All four families reported an initial improvement in the child's behaviour while the child was a resident of Children's Foundation. Once the child was transferred to Access, however, the families were divided equally between those reporting continuing improvement in the child's behaviour and those reporting deteriorating behaviour. As a result the trends from this particular Cottage are a concern, since the improvement in behaviour across time appears to be

operating at approximately the 50 per cent level with 50 per cent of the families continuing to improve during the time they are working with the Foundation on the Access program and 50 per cent of the families reporting a deterioration in the behaviour. Despite the fact that all families reported an improvement in behaviour while the child was a resident of the Children's Foundation, the maintenance of behaviour after transfer to Access is not consistent. In fact, this researcher hypothesized that the improvement in the behaviour reported by the parents during the time that the child was at Children's Foundation could in fact reflect a honeymoon period in which the parents were not required to deal with the child. Once the parents are asked to deal with their child in the home after transfer to Access occurs, the reality of having to deal with the child forces the parents to reassess their appraisal of his behaviour. At this time two parents reported a deterioration in their child's behaviour.

Parental Perceptions of Self

As indicated earlier in this analysis four of the eight families only had two probes available while four of the families had three probes available. In the four families on which only two probes were available, three of the families had Probes 1 and 3 available and of these three families none produced statistically significant results. Two parents reported an improvement in their feelings about themselves between Probes 1 and 3 while the third parent reported a slight deterioration in their feelings about themselves. The fourth family on which two probes were available was a single parent family with the father as the head of the household. In this particular case, the father reported an improvement in his feelings about himself as a parent between the time periods involved in Probe 1 and Probe 2. This represented an apparent improvement in this parent's

feelings about his skills as a parent while the child was resident at the Children's Foundation. Thus, for these four cases, three apparently experienced an improvement in their feelings about themselves as parents although none of the trends were statistically significant and the results could have been obtained by chance alone.

For the remaining four families in which three probes are available, the trends are much less pronounced. Two families reported an initial improvement in their feelings about themselves as parents between Probes 1 and 2 followed by a deterioration in those feelings between Probes 2 and 3. Significantly this deterioration between Probes 2 and 3 coincided with the reported deterioration in the child's behaviour during the same time period. One of these parents produced statistically significant data in the completion of the three probes while the second parent did not. The remaining two parents examined reported a continued improvement over all three probes in their sense of themselves as parents. In addition, both these cases produced statistically significant results indicating that the results obtained could not have occurred by chance alone. As a result, the overall trend in these four cases is particularly confusing. While all four parents report an improvement in their feelings about parenting during the time period Probe 1 to Probe 2, their feelings about their parenting skills differ after the child is transferred to the Access program. Two parents reported a continued improvement in their feelings about themselves as parents while two reported a deterioration. Once again, the parent results were split equally between those reporting continuing improvement and those reporting deterioration after the transfer to Access occurred.

Child's Perceptions of Self

In the four cases in which only two probes are available, two of the cases failed to provide data from the child. As a result, the remaining two cases were analyzed and both reported an apparent improvement in the self-concept of the child across the two probes. Cases 18 and 17 both had data available for analysis on the child and both reported the child's feelings about himself improving over time, although these results were not statistically significant.

In the four cases on which three probes were available, two cases reported a gradual improvement in the child's behaviour across all three probes while the remaining two showed a pattern of decrease from intake to transfer to Access followed by an increase in the child's feelings of self confidence.

Cases 21 and 22 both reported the child's feelings about himself improving across all three probes. In Case 22, the results were statistically significant indicating that this child's self report could not have occurred by chance alone, but that the child was reporting an apparent improvement in his feelings about himself. On the other hand Cases 20 and 23 reported a deterioration in the child's feelings about himself between Probes 1 and 2 followed by an improvement between Probes 2 and 3. As a result, the trends in the child report data are also confusing for these four families. In Case 20 the child did produce statistically significant data in completing the questionnaires.

The four cases on which three probes were available for the parents' perceptions of behaviour, the parental perceptions of self and the child's

perceptions of self, created a number of interesting trends, and are worth analyzing individually. Case 20 reported an initial improvement in the child's behaviour between Probes 1 and 2 accompanied with a parental perception of the improvement in the parents' performance as parents. The child's perception of self however reported a deterioration during the time that the child was a resident at Children's Foundation, and the completion of Probe 2. Once the child was returned home to his family, however, the trends are opposite with the parent reporting a deterioration in behaviour accompanied with a deterioration in the sense of self confidence as a parent as opposed to the child's report of an increase in his own self confidence. As a result the child's feelings about himself varied inversely with the reports of the parents' feelings about themselves as parents and of the child's behaviour.

In Case 21 the parent reported an overall improvement in both their own self concept and the child's behaviour. However the child's report of self varied from this significantly with the child reporting a deterioration in his self-concept between the completion of Probe 1 and 2 followed by an improvement in his self-concept between Probes 2 and 3 when he was returned home. As a result it appears in this case that the child's self confidence at the Children's Foundation deteriorated while the child was actually in care. Once the child returned home, it appeared that his self-concept improved but that his behaviour continued to improve at home.

Case 22 produced statistically significant results for all three questionnaires across all three probes. The parents reported an improvement in the child's behaviour which was accompanied by an improvement in their self-concept

and their self confidence as parents. In addition, the child reported an improvement in his own self confidence. As a result, it is possible to conclude in this case from the results that this particular family improved as a result of their contact with Children's Foundation. All the trends in the data indicate an improvement in this family across time.

Case 23, once again, produced problematic results. During the time that the child was resident at the Children's Foundation the parents reported an improvement in both their view of the child's behaviour and in their view of their own parenting skills. In addition, the child reported an improvement in his self-concept during the time that he was a resident at the Children's Foundation. Once this family was transferred to the Access program, however, the trends changed. The parents reported a deterioration in the child's behaviour accompanied with a deterioration in their sense of self confidence as parents. Only the child reported a stabilized self-concept during this second time period. As a result it is possible to conclude from this particular case that it appears, since only the behaviour scale was statistically significant, that once the parents were forced to deal with the child at home, their concept of themselves as parents and their view of the child's behaviour deteriorated.

These eight cases produced some interesting trends. Of the four cases on which data was available for analysis at three different time periods, the results were generally split equally in half as to the degree of improvement or deterioration in the behaviour of all three parties. As a result from these cases it is possible to conclude that it appears the Children's Foundation produces statistically significant changes in behaviour which

are maintained across time in 50 per cent of their cases. In the other 50 per cent of their cases the behaviour appears to deteriorate once the child is transferred to Access. This has significant implications for the agency in providing services to these families after the child is transferred to Access.

ii. Two Parent Families

Parental Perceptions of Behaviour

Of the five two parent families examined from Cottage 2, the trends in behaviour are equally confusing. Eight of the ten parents reported that their child's behaviour improved between the intake and transfer to Access probes. One parent had data missing for this time period and the tenth parent reported that the child's behaviour deteriorated once the child was admitted to Children's Foundation.

Once transfer to Access occurred, however, the trends changed. Four of the ten parents indicated that the behaviour began to deteriorate either significantly or gradually once the child was transferred to the Access program. One parent did not have data available for this time period. The remaining five parents indicated a gradual improvement or continuing improvement in their child's behaviour once the transfer to Access occurred. For the three parents on whom a fourth probe or follow-up probe was available, two reported a continuing deterioration in the child's behaviour. The third parent on which the four probes were available indicated that their child's behaviour continued to improve from discharge to follow-up probes. As a result the trends are equally confusing in these cases.

Nine of the ten parents reported changes in behaviour which were statistically significant. Of the nine parents on whom data was available for the time period between the intake and transfer to Access probes, eight parents reported an improvement in their child's behaviour. When these eight parents are examined for the second time period between Probes 2 and 3, three of these parents reported a continual improvement in their child's behaviour between the transfer to Access and discharge probes. Four parents reported a deterioration in behaviour during this time period while the fifth parent reported a stabilization in their child's behaviour during this time period. As a result, from examining these cases it is possible to see that the transfer to Access is once again a crucial stage in the treatment of these families. At this point in time the parents reported a more serious deterioration in their child's behaviour once the child was transferred to Access. In fact more families reported this occurring than a continual improvement in the child's behaviour. The conclusions seem to be that for this particular cottage with two parent families more children deteriorate after the transfer to Access occurs than improve. This, once again suggests the existence of a honeymoon period during the time the child is a resident of Children's Foundation and parents can see an improvement in behaviour. Once the child is returned home and the parents are forced to deal with the child on their own, their view of his behaviour changes drastically. During this time period they tend to report a deterioration in the child's behaviour.

Parental Perceptions of Self

The analysis of the questionnaire on parenting behaviours for these ten parents also produced a number of interesting results. For one parent

results were not available until Probe 3 at which point his parenting results apparently continued in a stable pattern. Two parents reported a continual deterioration in their sense of their parenting skills across time while four parents reported a slight decline between Probes 1 and 2 followed by an upswing in their feelings about parenting after that point in time. One parent recorded a continual deterioration in his feelings about parenting over time after an initial wavering about his feelings on parenting during the time periods bounded by Probes 1, 2 and 3. For this particular parent, his follow-up probe indicated that his feelings about parenting deteriorated significantly on the follow-up probe. The last parent reported a gradual increase in her sense of her parenting abilities across time, however, in her case, she reported a slight dip in her self confidence in parenting at Probe 3. Once again, the trends are not conclusive, although more parents seem to report a gradual decrease in their overall parenting skills across the probes.

For the parents completing the parenting score four parents reported changes in their feelings about themselves as parents that were statistically significant. As a result the remaining ten parents' feelings about parenting behaviour were not statistically significant and could have occurred by chance alone. For those four parents who reported statistically significant trends in their feelings about themselves as parents, three reported a deterioration in their feelings as parents while the fourth reported an improvement over time. As a result for this group of parents the most significant trend appeared to be a deterioration in their feelings about parenting over time.

Child's Perceptions of Self

For the five children involved in these two parent families, four of the children reported an apparent increase in their self esteem between Probes 1 and 2, while one child reported an apparent decline in his self esteem. After Probe 2, however, the trends change significantly. In Case 26 the child reported an apparent stabilization or levelling in his feelings of self esteem between Probes 2 and 3 followed by a deterioration between Probes 3 and 4. Two of the children in Cases 27 and 28 reported a continued improvement in their self-concept to the third probe. Then, one of these two children reported an apparent decline in their feelings of self esteem between the third and fourth probes. The child in Case 26 reported an apparent stabilization between Probes 2 and 3 after an initial improvement in his feelings of self esteem. The final child in Case 25 reported an initial deterioration in his self esteem between Probes 1 and 2 followed by an improvement in self esteem between Probes 2 and 3. As a result the overall findings for these children are conflicting.

Two of the five children reported increases in self esteem, two of the five children reported decreases in self esteem and one child reported an initial increase then stabilization. This is further confused by the fact that only two of the five responses to these particular questionnaires are statistically significant. In addition, the trends that are statistically significant reported one case where the child's self esteem improved across two probes and then deteriorated after the discharge probe and a second case where the child's self esteem deteriorated initially followed by an improvement between Probes 2 and 3.

In summarizing the data for these two parent families some interesting trends occur. In these five families not one of the two parent couples agreed on their perceptions of themselves as parents or on their overall perceptions of the child's improvement or deterioration in his behaviour. While a number of parents might have agreed during the initial intake to Probe 2 period during which time the child was a resident of Children's Foundation, after that point the parents did not agree on what happened to the child's behaviour. As a result the trends in the reports from the parents on the child's behaviour changes and their own perceptions of self as parents are extremely confusing. Since only four of the ten parents responding to the parenting questionnaire produced statistically significant results, the trends may be reviewed with caution. However for these four parents who did produce statistically significant results, three of them reported a deterioration in their feelings about themselves as parents coinciding in two cases with a deterioration in the child's behaviour. As a result the overall improvement for these parents in their feelings about themselves as parents is not encouraging.

Despite the fact that nine of the ten behaviour scales are statistically significant, the improvement in behaviour is also confusing. More frequently than not behaviour deteriorates after the transfer to Access occurs so that the trends in behaviour for these particular families are confusing. Similarly any comparison between the parental perception of behaviour and of themselves and the child's perceptions of self are inconclusive. The trends do not appear to demonstrate any marked patterns of relationship between these three scales. Once again, in only two of the five cases were the child's scales statistically significant which again limits the

degree to which this researcher can reach any valid conclusions on the basis of the data provided.

b. Comparative Analysis by Cottage Group

The thirteen cases analyzed by this research project in fact involved a total of eighteen parents. Five of the families included two parent families while the remaining eight families had single parents as the head of the household. As a result the analysis of the data across this group considers all eighteen parents.

i. Probe 1 - Probe 2 Time Period

Of the eighteen parents responding to the questionnaire regarding their child's behaviour, sixteen indicated that their child's behaviour improved between the completion of the intake probe and the completion of the probe at the transfer to Access point of time. One parent did not have data available for this time period and the eighteenth parent indicated that their child's behaviour deteriorated between the completion of these two probes. As a result the overall impression here is that the child's behaviour did improve while the child was in residence at Children's Foundation.

For these same eighteen parents, the questionnaires on parenting provide similar trends. Between Probes 1 and 2, nine parents indicated that their feelings and attitudes towards parenting improved during the time period that the child was in residence at Children's Foundation. Once again the data for two of these parents is based on the speculation of a straight line relationship between Probes 1 and 3, which were the only probes

available for these parents. Eight parents indicated that their feelings about parenting deteriorated between the first and second probes. The eighteenth parent did not have data available for this time period.

Of the thirteen children involved in these cases, only eleven were available for analysis since two children had failed to complete the questionnaires relating to self-concept. Of the remaining eleven, one case did not have data available after Probe 2.

For the time period between Probes 1 and 2, eight children reported an apparent improvement in their self-concept and three children reported a deterioration in their feelings of self-concept. Of those children reporting an apparent increase in their self-concept, one case is based on the extrapolation of the trend between Probes 1 and 3. This again is a dangerous assumption to make, since the data at Probe 2 could be higher or lower than either of these other two probes.

ii. Probe 2 - Probe 3 Time Period

Once the analysis moves on to study the eighteen parents between Probes 2 and 3, however, the data becomes somewhat more confusing. Two of the parents did not have data available for this time period. For a further three parents the actual data between Probes 2 and 3 can only be speculated at, since Probe 2 was actually missing for these three parents. Generally, based on this speculation and an assumption of a straight line relationship between the behaviour at Probe 1 and Probe 3, it appears that behaviour continued to improve according to these three parents.

The remaining thirteen parents showed a variety of responses to these two probes. Five parents responded indicating that their child's behaviour continued to improve between Probes 2 and 3. One parent indicated that the child's behaviour maintained itself between these two probes while the remaining six parents indicated that their child's behaviour deteriorated after the transfer to Access occurred. As a result, it appears that more parents felt that their child's behaviour deteriorated after the transfer to Access occurred.

When the results for the parenting self-concept questionnaire are examined for this time period, the trends become equally confusing. For two cases the data was not available for this particular time period. For two cases the speculation of a straight line relationship appears to indicate a continued improvement in the parents' feelings about their skills as parents. In a third case, the same speculation produces a result which appears to indicate a decrease in parenting feelings. This eliminates a total of five of the eighteen parents leaving thirteen for further analysis. Eight parents appear to indicate an improvement in their sense of their parenting skills during this time period, while five reported a deterioration in their feelings about parenting. Thus, the majority of parents here appeared to improve their self-concept as parents.

When the time period between these two probes is examined for the children, seven of the eleven children available for analysis reported an increase in their feelings of self worth or self confidence, while two children reported an apparent stabilization in these feelings. In addition, one child did not have data available for this time period. The final child

based on an extrapolation of the data between probes 1 and 3 appeared to report a continued improvement in his self-concept during this time period.

iii. Probe 3 - Probe 4 Time Period

For the three parents on which additional probes were available beyond Probe 3, one parent indicated that her child's behaviour continued to deteriorate, one parent indicated that the child's behaviour continued to improve and the final parent indicated a slight deterioration in his child's behaviour. As a result, the trends are again confusing but, if averaged, would show a deterioration in the child's behaviour once the child was discharged from Children's Foundation.

In looking at this time period for the parental perceptions of self scales the trends are equally confusing. Two of the three parents reported a continued improvement in their feelings about themselves as parents, while one parent reported a continuing deterioration in those feelings. As a result, interestingly enough two of these three parents produced statistically significant results in responding to the parenting scales. These two parents reported opposite trends in their feelings about their skills as parents during this time period.

Finally, for the two children on which a fourth probe was available, both children reported a decline in their sense of self confidence during this time period. Again, the results of this questionnaire are confounded by the fact that one child produced statistically significant results while the others' results were not statistically significant. However, the overall trend appeared to be one of deterioration during this time period.

When the overall trends for these particular cases are examined it is possible to see that the transfer to Access appears to be an important occurrence in most of these families. At this point in time behaviour is likely to begin to deteriorate or at the very least change direction and perhaps improve where previous deterioration was reported. For a number of parents their views of their child's behaviour changed at this point reflecting a deterioration in their child's behaviour. For a number of children their views of themselves began to improve at this point in time which appears to be an opposite trend to the reported behaviours viewed by the parents. Finally, for a number of parents, their own sense of their parenting skills also change at this time, with a number of parents reporting deterioration at this point in time and a number reporting improvements. Consequently, the results after the transfer to Access occurs appear to be the most significant data that can be obtained from this research study. This point in time is obviously critical in the continued improvement or maintenance of family behaviour after the family is discharged from the Children's Foundation.

3: Analysis by Cottage: Cottage 3

Cottage 3 had a total of ten cases which were selected for analysis in this particular research project. Of these ten cases, six represented single parent families while four represented two parent families. All of these families involve work with children who are in their teen years, and, as a result, represent a different population than the population studied at Cottages 1 and 2. Consequently, the comparison between the results

TABLE VII

CASE RECORD DATA: TWO PARENT FAMILIES

Cottage 3

CASE NUMBER	FAMILY SIZE	QUESTIONNAIRE NUMBER	PAGE 1	PAGE 2	PAGE 3	PAGE 4	ALL RANKS	DEGREES OF FREEDOM	CHI-SQUARE	CHI-SQUARE @ .20p / Xr ² @ .20p	
35	2 FA	1	16.5	32	23.5		10.4	2	.01	3.219	(1)
		2	5	7	6		.67*		.944	4.667	(2)
		see below									
	MO	1	13.5	29	29.5		13.79	2	.001	3.219	(1)
		2	4	6	8		2.67*		.361	4.667	(2)
		3	6.5	8.5			.80*		.954	3.6	(3)
36	2 FA	1	21.5	19	30.5		2.13	2	.30	3.219	(1)
		2	5.5	5.5	7		.50*		.944	4.667	(2)
		see below									
	MO	1	19.5	21.5	31.0		6.30	2	.05	3.219	(1)
		2	5	5	8		2.00*		.528	4.667	(2)
		3	10.5	6.5	13.0		4.30		.124	3.6	(3)
37	2 FA	1	18.5	19.5	34		12.54	2	.01	3.219	(1)
		2	9	4.5	5.5		7.83		.028	4.667	(2)
		see below									
	MO	1	18.5	21	32.5		9.29	2	.01	3.219	(1)
		2	7	6	15.0		.67*		.944	4.667	(2)
		3	12.5	9.5	18.0		2.10*		.367	3.6	(3)
38	2 FA	1	26	35.5	23	34.5	2.77*	3	.50	4.62	(1)
		2	9	8.5	4	8.5	3.30*		.273	4.667	(2)
		see below									
	MO	1	26	31	24.5	37.5	2.18*	3	.60	4.62	(1)
		2	5	8	11	6	4.20*		.27	4.667	(2)
		3	11	9	14.5	15.5	3.30*		.27	3.6	(3)

Footnote.

@ 1 degree of freedom = 1.642 @ .20 p

1. CHI-SQUARE @ 2 degrees of freedom = 3.219 @ .20 p

@ 3 degrees of freedom = 4.624 @ .20 p

2. Friedman two-way analysis of ranks 4.667 @ .194 p

3. Friedman two-way analysis of ranks 3.6 @ .182 p

* insignificant

obtained by this Cottage and the other two Cottages who deal with six and twelve year olds, is at best speculative, since the population groups differ significantly.

a. Analysis by Parent Group

The analysis of the data collected by parent group is equally difficult for this particular Cottage. Unfortunately, there are only two single parents who completed more than two probes which can be analyzed reliably. In addition, of the four two parent families, only three of the families provide data which are significant. The one family on whom follow-up data was available produced no significant data whatsoever.

i. Single Parent Families

Parental Perceptions of Behaviour

Cases 29, 30, 31 and 32 provide data on four of the six single parent families with two or three probes available. The first three cases have the intake and transfer to Access probes available while the fourth case, Case 32, provides intake, transfer to Access and a follow-up probe, but is missing the discharge probe. When time periods one and two are looked at, the parents report an improvement in the behaviour of their children between intake and transfer to Access. All of these apparent improvements in their child's behaviour are significant when analyzed statistically. However, the unfortunate part of this particular analysis is that only two probes are available and the data obtained from these two probes is very

tentative. It is impossible to guess what type of behaviour one might observe after the child was transferred to Access.

Case 32 demonstrates the problem of interpreting data with only two probes present. While this researcher speculated that a straight line relationship might exist between Probes 2 and 4, it is entirely possible that the data varies between these two probes and that the child's behaviour at follow-up represents a significant deterioration or improvement in his behaviour over this time period. Such a deviation from the straight line variation would of course change the significance of the data obtained at follow-up. As a result in extrapolating the results between Probes 2 and 4, it is difficult to say whether the behaviour is improving or deteriorating since the behaviour at discharge or Probe 3 stage of treatment might have been significantly better or worse than the behaviour reflected at follow-up.

Case 33 and 34 provide the only data that is reliable since three probes are available. In these cases, the two parents report that behaviour generally improved during the phases between Probes 1 and 2 or residence at Children's Foundation. The parent for Case 33 suggests that the child's behaviour began to deteriorate slightly after he was returned home and the family was on the Access program only. On the other hand, the parent in Case 34 reflects an opposite trend reporting a continuing improvement in her child's behaviour while the family was being seen through the Access program. However, this parent reports a rapid deterioration once the child was discharged from treatment.

Parental Perceptions of Self

The parents' responses to the parenting questionnaire are generally positive, however when extended past Probe 2, become more questionable. All six parents responded stating that their feelings about their parenting skills improved during the initial stages of treatment when the child was a resident of Children's Foundation. It is important to note that none of these trends were statistically significant and as a result only very tentative statements can be made of how parents actually felt about their parenting skills. Once this researcher looked at the time periods between Probes 2 and 3 for the two parents on whom this data is available, the parents report a decline in their feelings about their effectiveness as parents. This contrasts with the supposed improvement in parenting that has been extrapolated for Case 32 between Probes 2 and 4. It is equally possible that at Probe 2 stage for the Case 34 parent, that a decline in feelings about parenting would also be evident.

Finally, Case 34 provides more information indicating that this particular parent reported an improved feeling about parenting once the child was returned home and the parent had no further contact with Children's Foundation. Six months after contact ceased this parent reported improved feelings about her parenting skills. Again, this researcher cautions the reader to be aware of the fact that even the results presented are very tentative, since only one of the six parents provided data which were statistically significant. The balance of the trends in the data as observed on the charts could occur equally by chance alone, and therefore are not reliable trends.

Child's Perceptions of Self

In Questionnaire 3 the respondents all provided data that was statistically insignificant. Four of the six children reported that their feelings about themselves and their self confidence appeared to increase over time between Probes 1 and 2, while two stated that their feelings about themselves deteriorated during this time period. Once the data is extended, however, the only child for whom data is available indicated a decline in his own feelings of self worth after Probe two while he was on the Access program. Finally, once he was discharged from the Children's Foundation, the child reported an increased sense of self confidence six months after at the follow-up probe. As a result, Case 34 for which the most data on the child is available, demonstrates the dangers of interpreting data which is statistically insignificant. The trends that appear in the four cases reporting positive improvement in the child's feelings could equally resemble Case 2 (which is one of the four) in which the child basically had not developed any greater sense of self esteem during the time that he had contact with the Children's Foundation.

ii. Two Parent Families

When this researcher looked at the material available on the two parent families from this Cottage, the data appeared to be somewhat more reliable.

Parental Perceptions of Behaviour

Of the eight parents that provided information on the child's behaviour in this questionnaire, seven parents reported that their child's behaviour improved between the first and second probes, or in other words, while the

child was a resident at Children's Foundation. One parent reported that the child's behaviour deteriorated.

When the time period between Probe 2, or transfer to Access, and discharge is examined, however, the trends change slightly. Three of the eight parents reported that the child's behaviour deteriorated while the remaining five parents reported an improvement in their child's behaviour during this time period. This might lead a researcher to conclude that in fact this Cottage had been helpful in providing assistance to five of the eight parents in changing their child's behaviour. However, Case 38 provides problematic evidence which throws into question any such conclusion. The data from the parents completing this questionnaire was insignificant and demonstrated a great degree of variability in the pattern of the data that Children's Foundation collected. Consequently, by collecting data at four points in time it is possible to see the great amount of fluctuation in the behaviour and responses of these two parents which occurs simply by chance alone. As a result, in reaching the conclusions after three probes, this researcher feels that one must be more cautious in stating that these five parents who reported improvement in their child's behaviour would continue to report such improvement over extended periods of time.

As an example, the father in Case 35 reported a deterioration in his child's behaviour after the child was transferred to the Access program. Thus, the interpretations of the data obtained on the child's behaviour can be problematic. Overall, there appears to be a trend as reported by a majority of the parents towards improvement in the child's behaviour while the child is on the Access program. However, two of the parents also note

reverse trends where behaviour either begins to improve or deteriorate at the transfer to Access point.

Parental Perceptions of Self

In examining the results on the parenting questionnaire, the results are even less helpful. In examining the time period between Probes 1 and 2, four parents reported that they improved their sense of self confidence about parenting. On the other hand, a further four reported that these feelings decreased. As a result, there seems to be counter balancing trends in these four parents as the population is clearly divided in half, with half reporting improvement and half reporting deterioration.

When this researcher then looked at the time period between Probes 2 and 3, three parents reported that their self confidence decreased while the remaining five reported that their feelings and attitudes towards parenting improved during this time period. Finally, when the last probe is obtained on Case 38 the parents reported opposite trends in their feelings about parenting. The parent who reported the most positive improvement in their feelings about parenting reported a rapid deterioration in these feelings once the family was discharged from the Foundation. However, the parent who reported the most negative feelings about it reported an increased sense of ability as a parent. These trends counter-acted each other in this particular case. This particular case on which four probes were available demonstrated a final problem with this family that none of the data collected on either parent was statistically significant. As a result, it throws into question the entire trends observed in this family.

Child's Perceptions of Self

For the four two parent families the children reported varying trends. In Case 35 only two probes were available at intake and transfer to Access. The balance of the cases had three or four probes available.

Generally the four children involved reported a deterioration during the time that they were in care. The trends for three of the four children between the intake and transfer to Access program demonstrates one of deterioration for Cases 36, 37 and 38. Only Case 35 on which the two probes are available reported an improved sense of self-concept during this time period.

When the three cases on which more than two probes are available are examined, the trends begin to show variations. Cases 38 and 36 report an improvement in the child's feelings of self-concept while Case 37 reported a continuing deterioration in the child's self-concept. Consequently the two children who initially reported deterioration in their feelings of self confidence while they were resident at Children's Foundation reported an improvement in their self-concept once they were returned home and transferred to the Access program.

Case 38 on which four probes were available demonstrated a continued improvement in the child's self-concept between Probes 3 and 4. As a result this child demonstrated an improvement in his self-concept once he was transferred to the Access program and living at home again. In this particular case the mother, however, demonstrated a deterioration in her self confidence as a parent once the child was returned home and the

parents had no further contact with the Children's Foundation. This case demonstrates differing trends between both parents where the father reported a deterioration in his own feelings as a parent during the time the family had a contract with the Children's Foundation, while the mother reported improvement in her feelings as a parent. These trends both reversed once the child was returned home and service from the Children's Foundation was terminated. The father reported an improvement in his feelings as a parent and the mother reported a deterioration. Unfortunately in the analysis of the children's data, only one child produced statistically significant results, so that these results are very tentative. Case 36 in which the child produced statistically significant results reflected a pattern of deterioration in the child's feelings of self confidence during the time he was a resident at Children's Foundation and an improvement when he returned home.

b. Comparative Analysis by Cottage Group

i. Probe 1 - Probe 2 Time Period

Parental Perceptions of Behaviour

During this time period, thirteen of the fourteen parents who responded to Probes 1 and 2 indicated that their child's behaviour improved during this period of the treatment program. Interestingly enough, all but two of the parents' responses to their child's behaviour were statistically significant, indicating that the behaviour changes reported by the parents could not have occurred by chance reporting from the parents alone. Consequently during this time period it is possible to conclude that the child's behaviour did improve during the time that the child was a resident of the Children's

Foundation.

Of the fourteen parents who responded to the questions on parenting during this time period, eleven parents reported improvements in their self-concept or perceptions of self as parents. As a result, the behaviour of the child appeared to improve in a majority of cases, linked with an apparent improvement in eleven of the fourteen parents' perceptions of self as parents.

The children who responded to this particular questionnaire, however, reported diverse trends. Five of the children reported an increased sense of self confidence while four children reported a deterioration in that sense of self confidence. The tenth child apparently reported or observed no change in his own feelings about himself during this time period. As a result the division between the child's perceptions of self during this time period are approximately equal, with five children reporting improved senses of self-concept and four reporting deteriorating senses of self-concept. As a result it appears that the comparison between the parents' perceptions of themselves and their perceptions of the child's behaviour might improve during this time period but this does not necessarily reflect an improvement in the child's perceptions of self. In fact, it is significant that in those four children who reported a deterioration in their self-concept, parents were reporting an improvement in their sense of themselves as parents. As a result there appears to be an inverse relationship in these cases between the parents reporting of the child's improved behaviour and their own skills as parents and the child's perception of self.

ii. Probe 2 - Probe 3 Time Period

When the analysis is extended to consider these same ten families during this time period, three of the families did not have data available beyond the second probe. As a result the sample is reduced to seven families in which data is available for analysis during this time period. One of these families, in addition, has a probe available at follow-up only and is missing the third probe, so that the data from this particular family is highly speculative.

For the analysis of this time period of the eleven families available for analysis, seven reported their child's behaviour continued to improve while four families reported that their child's behaviour began to deteriorate during this time period. This of course reflects the point at which the child was transferred to the Access program and returned home to the family. During this time period the family would continue to have contact with the Children's Foundation through the family counsellor for family counselling sessions, but the child would be living at home. Consequently this apparent downswing in the child's behaviour improvement appears to indicate for a number of families that the families are now forced to work with the child at home and are experiencing perhaps more difficulties in dealing with that child at home.

Significantly, one of the parents who reports an improvement in his child's behaviour at home in fact is a father who initially reported a deterioration in his child's behaviour during the time that the child was at Children's Foundation. As a result, this represents an apparent improvement in this child's behaviour since the child has returned home. The balance of the seven

cases reporting an continued improvement in their child's behaviour reflects an ongoing trend towards improving behaviour. In the cases of those four parents who reported a deterioration in their child's behaviour once the child returned home, each of these cases represented a change in the apparent trend in this child's behaviour. Each of these four children had apparently, according to the parents, improved their behaviour during the time that the child was a resident at Children's Foundation, but once returned home demonstrated a marked deterioration in their behaviour.

When these same eleven parents are examined on their responses to the parenting questionnaires, a number of changes occur. Interestingly enough, six parents report an improvement in their self perceptions during this time phase. Of these six parents, two represent a change in the trends in their reported behaviour. This indicates that at least two of these six parents had initially reported a deterioration in their feelings about themselves as parents during the first phase of treatment at the Children's Foundation and during the second phase when the child was returned home began to experience an improvement in their self concept.

Of the five parents who reported a downward trend in their feelings about themselves as parents, three of these parents reflected a similar reverse trend. These three parents had initially reported an improvement in their self-concept during the time the child was a resident at the Children's Foundation. However, once the child was returned home, these parents began to experience a deterioration in their self-concept and confidence as parents and reported a downward trend. As a result for these three parents it is possible to see that the actual reality of dealing with the

child at home has created further difficulties for them in their perceptions of themselves as parents. Only two of these five parents initially reported a deterioration in their sense of themselves as parents across both time periods, i.e. the time period between intake and discharge, or Probes 1 and 3.

The analysis of the child's responses in this time period are also somewhat problematic. Two children failed to complete a third probe which further reduced the sample available for analysis from seven children to five children. Of the five children who completed the third probe, two children reported an improvement in their self-concept during this time period. Significantly both these children represented a reversal in their apparent trends during the first time period. Both these children had indicated during the time that they were resident at the Children's Foundation that their self-concept had deteriorated. Once returned home these children appeared to improve their sense of self confidence and self-concept and reverse this downward trend.

For the three children who reported a downward trend in their feelings about themselves during this time period, only one represented a reversal. In other words, in the case of one child who had initially felt his self-concept improved during the time that he was resident at Children's Foundation, but once returned home began to feel less confident about himself. The remaining two children indicated a continuing downward trend in their feelings about themselves. One of these two children, of course, involved a case in which the data had to be extrapolated between Probes 1 and 4, since the other probes were all missing.

In examining these cases for consistency in the trends of the reporting for each group of responses, it is possible to see that a number of trends do exist. In examining the eleven parents for whom three or more probes are available on the behaviour of the child and their own self-concept, it is possible to see two cases in which the parents' perceptions of self seem to be linked with trends in the parents' perceptions of their child's behaviour. In these two cases, the parents' perceptions of self follows the same pattern as their reported perceptions of their child's behaviour. Both these cases represent situations in which the child improved during the first time period and deteriorated during the second time period. In these cases the parents' patterns of response to the parental scales also reflected similar improvements during the initial period of treatment followed by a deterioration after that. Two further cases demonstrated an apparent correlation between the parents' reported improvement across time in their own parenting skills, coupled with a reported improvement in the child's behaviour across time. As a result in four cases the trends in the parent response data and the parents' perceptions of the child's behaviour tended to correlate and vary in similar directions. In the remaining seven cases on which data is available, parent trends vary and do not appear to be correlated with any of the responses that they provide on their child's behaviour. As a result it is possible to see that in the majority of these cases the links between the parents' perceptions of self and the child's behaviour do not exist. For example, in Case 37, one of the two parents reported an improvement in their child's behaviour across all three probes and yet reported a deterioration in her own sense of effectiveness as a parent. Her partner, on the other hand, reported an improvement in his child's behaviour coupled

with an initial deterioration in his own feelings about himself as a parent followed by an improvement during the second time period between Probes 2 and 3. In Case 38 both parents reported their child's behaviour varying regularly in a saw-tooth pattern. However, the parents' perceptions of self varied differently. For the father in this particular case, he initially reported a continued deterioration in his own feelings about himself as a parent between Probes 1 and 3, followed by an improvement between Probes 3 and 4. The mother, on the other hand, reflected an opposite trend in her own reports and reported an improvement in her own sense of self confidence and self worth between Probes 1 and 3 followed by a deterioration between Probes 3 and 4. As a result from this case this researcher wonders how these two parents related since it appeared that their own responses to the parenting questionnaires varied inversely to each other and yet their reports on the child's behaviour were consistent in the trends they reported. Similar to the two parents in Case 38, the single parent in Case 34 reported similar trends. The parenting scores varied in a saw-tooth pattern across the four probes while the child's behaviour improved between Probes 1 and 3 and deteriorated between Probes 3 and 4. As a result there was not direct relationship apparent in this data between the child's reported behaviours by the parent and the parent's self-concept. Consequently the overall conclusion from this data is that the trends are confusing between parents and parents' reports of their children's behaviour.

When the behaviour of the child is compared to the reports from the parents on themselves and their child's behaviour the trends are equally confusing. For the five children on whom the three probes are available the results

are less than enlightening. One child reports a continued deterioration in his self-concept which follows the same pattern of the parents' response to the parenting questionnaire. A second child in a single parent family reports a similar trend to that of his parent in which the child's self-concept follows a saw-tooth pattern the same shape as that of his mother. As a result in this case the child's perceptions of self seem to vary at the same rate as the mother's self-concept. In another case the child's self-concept varies inversely with the parent beginning by deteriorating during the initial series of treatment and improving during the last series during which the family was followed-up after six months. On the other hand, the mother's responses to the parenting questionnaire improved during the first two phases and deteriorated once the child returned home. This is Case 38 in which the parents' responses from both parents in this family vary inversely on the parenting scales. In yet another case a child's self-concept deteriorates then improves across the three probes followed by no change in the parenting score during the first time period and an improvement during the second time period. In the last case on which these probes are available, the child's self-concept deteriorate steadily across time although this is speculative data since only Probes 1 and 4 are available while the parents' self-concept improves over time, although this also is speculative since only Probes 1, 2 and 4 are available. As a result in this case the parents' perceptions of self and the child's self-concept appear to vary in an inverse relationship.

It is important to note that in all these cases only two of the fourteen parents produced statistically significant behaviour and only one of the ten children produced statistically significant behaviour. In these cases

only the behaviour scales produced continually reliable results with twelve of the fourteen behaviour scales producing statistically significant results. As a result, many of the conclusions reached during this analysis are very tentative since they are based on data which has not been shown to be statistically significant and is therefore of questionable reliability. In general the analysis is based on what appear to be trends in the data, but these trends could be occurring by mere chance alone and not reflect any real change in the individual's perceptions of self or of the child's behaviour.

2. Comparative Analysis

a. Comparative Analysis With Other Cottages

i. Single Parent Families

For the three Cottages, twenty-four single parent families were available for a comparative analysis of the overall results for each of the probes. Of these twenty-four families, exactly half or twelve had two or more probes available with data missing between the probes. As a result, these particular families provided some initial data on the trends in the responses to the various questionnaires, however, these trends are at times speculative due to missing data.

The remaining twelve families provided additional information that was available with at least three probes for each family.

Parental Perceptions of Behaviour

For the twelve families on whom material was available between probes 1 and 2, all twelve reported that their child's behaviour improved during the phase of treatment in which the child was resident at the Children's Foundation. Of these twelve families, however, four of the families were missing Probe 2 so that the data was highly speculative based on the assumption of straight line relationships between the data available at Probe 1 and the data available at a subsequent probe, either 3 or 4. As a result, relying on this particular data is extremely tricky in assuming any sense of reliability in interpreting the data. The remaining eight families provided data on the child's behaviour between Probes 1 and 2 and all reported improvement in their child's behaviour. Of these twelve families, eleven reported statistically significant changes in behaviour during the first time period.

For the twelve families who had three or more probes available the responses to the behaviour between Probes 1 and 2 varied. Ten reported that their child's behaviour improved while the child was a resident at Children's Foundation, while two reported a deterioration in his behaviour during this time period. As a result the majority of families reported that their child's behaviour improved while the child was a resident at Children's Foundation and was receiving treatment. These ten families further support the previous twelve families, all of whom reported that their child's behaviour improved in the time period during which the child was a resident at Children's Foundation. All twelve case reported here produced statistically significant data.

When the time period between Probes 2 and 3 is examined, however, a number of changes occur. Of the ten families who reported initially improving behaviour during the first phase of treatment, five families reported a deterioration in the child's behaviour once the transfer to Access occurs. Five families reported that the child's behaviour continued to improve after the transfer to Access occurs. The remaining two families who reported a deterioration in their child's behaviour initially report an improvement in the child's behaviour once he is returned home in one family, while the second family reports a continued deterioration in that particular child's behaviour. As additional support for the interpretations placed on this data by this researcher, a review of the families on which only partial data is available reveals somewhat similar trends. Three families have a third probe available, either Probes 3 or 4, which provides a third measure of the child's behaviour after the transfer to Access occurs. Of these three families, two reported a continuing improving behaviour once the transfer to Access occurs and the family continued to have contact after the child was returned home. The third family reported a deterioration in behaviour. These interpretive results are highly speculative. In reviewing the data the information indicated that, for these two families who recorded improved behaviours at Probe 4, these behaviours existed at a higher level or higher sum of ranks at the fourth probe than was evident during the treatment phases.

On the one case that has four probes available for analysis on the child's behaviour, the parent reported a decline in the child's behaviour once the child is formally discharged from Children's Foundation and is returned home with no further contact with the Foundation. As a result the final

probe or follow-up probe indicated that behaviour has somewhat deteriorated when the parent completed that probe six months after the child was discharged from Children's Foundation.

In interpreting these results, this researcher notes a number of trends which can possibly explain some of the trends in the data. Initially it was felt that at the transfer to Access stage, the parents would be experiencing somewhat of a honeymoon effect in their assessment of their child's behaviour. In fact, the child had been in treatment at Children's Foundation for a set period of time, the parents had been receiving massive support in learning behaviour modification techniques and the parents had not had to deal with the child's specific behaviour in the home for extended periods of time. As a result it is likely that the parents might assess the child's behaviour to be significantly improved between the completion of Probe 1 at which time they have no support and are dealing directly with the child's behaviour, and Probe 2 at which time the child has been out of the home for an extended period of time and they are only dealing with his behaviour on weekends.

Once the honeymoon period is over, one would expect a slight decline in the child's behaviour or in the parents' assessment of that behaviour. As a result, the trends seem to indicate that some of the parents reported this deterioration in their child's behaviour as occurring. However, an equal number of parents appeared to indicate that the child's behaviour continued to improve. This raised questions for this researcher regarding whether the honeymoon period does exist or whether the parents' assessments of their child's behaviour are accurate enough to reflect a deterioration where

support is withdrawn or maintenance where parents feel supported continues to improve across time. As a result, this is an important question that the Children's Foundation will have to consider in interpreting these results. When specific cases are examined in the light of further background information which is available in the Foundation records, these questions may be answerable.

Parental Perceptions of Self

In analyzing the results for Questionnaire 2, a number of equally interesting trends occur. Of the twelve families on whom only two probes are available, eleven reported an improvement in their feelings and attitudes towards parenting, in that the sum of ranks increased from Probe 1 to Probe 2. The twelfth parent reported a decrease in his sense of his effectiveness as a parent. Again, this researcher must caution that only two probes are available for most of these families and that interpretation of this data must be cautious since it is possible for a great deal of variation to occur in the parents' responses to these probes. In addition only two of these parents' responses produced statistically significant results. All the other data could be occurring as a result of chance .

For the twelve parents on whom three probes are available, similar trends occurred. Nine of the twelve parents reported that their feelings about parenting had improved between the first and second probes. The remaining three reported a deterioration in their feelings about their effectiveness as parents. When the study is extended to consider the third probe and the responses to parents at that time period, an interesting variation in responses occurs. Seven of the nine parents who initially responded

positively about their feelings on parenting reported a deterioration in this sense of their role as parents. The remaining two parents who responded positively during the initial questionnaires about parenting continued to indicate an improved sense of their roles as parents. Finally, the three parents who responded negatively about their feelings as parents during the time period between Probes 1 and 2 continued to indicate a deterioration in their feelings about their parent roles. As a result, it is interesting to note a significant deterioration in these parents' feelings about their effectiveness as parents in responding to the questionnaires. For the one parent who has a fourth probe available, the time period between Probes 3 and 4 reflects an increasing sense of their effectiveness as parents.

Overall these results must again be interpreted cautiously. Only ten of the twenty-four parents produced results which were statistically significant which again limits the usable material that might be obtained from these questionnaires. As a result the trends in the remaining fourteen parents can only be used as speculative interpretations. Since a number of these trends are insignificant, caution must be assumed in interpreting these results.

It is important to remember that whether the trends are statistically significant or not, the rapid deterioration in these parents' feelings about their roles as parents occurs after the child is returned home and the parent is forced to assume ongoing responsibility for the care, custody and supervision of their child. As a result, one may once again speculate about the existence of a honeymoon phase during which the parents are able to respond positively to the questionnaires on parenting when the child has

been out of the home. They are forced to re-assess the situation once the child is returned home and they are forced to cope with his particular problematic behaviour.

Child's Perceptions of Self

On examining the twelve families with two probes only or with missing data, eight reported an increased sense of self confidence. Two children failed to respond to the questionnaires or the data was unavailable and the remaining two children reported a deterioration in their feelings about themselves during this initial phase.

When the twelve families on whom three or more probes are available are examined, the child's responses to the child questionnaires become more problematic. Five children reported an increase in their perceptions of self from the first to second probes. The remaining seven children reported a deterioration in this time period.

Once the examination of the children's responses to this questionnaire is extended to include the time period between Probes 2 and 3, three children report that their feelings about themselves continued to improve during this time period. Five children who initially reported that their feelings about themselves deteriorated during the time that they were residents at the Children's Foundation, reported that their feelings about themselves improved after discharge from the program. One child failed to complete Probe 3 in this case for Cottage 3 (the child actually refused to complete the third probe). One child reported no change in his feelings about himself between Probes 2 and 3. One child, who initially reported

little or no change between Probes 1 and 2 reported a deterioration between Probes 2 and 3. Finally, one child reported a continuing improvement in his feelings about himself. For the one child on whom a fourth probe was available which, after a period of deterioration between Probes 2 and 3, he reflected an increased sense of self confidence between Probes 3 and 4.

As a result, the trends are again confusing. For many children, their feelings about themselves tended to deteriorate during the time that they were resident at Children's Foundation and appeared to improve once they were discharged. Frequently these trends reflected opposite trends to the behaviour of the child according to the parents' assessment. Once again, it is important to interpret these trends cautiously because out of the entire twenty-three children who responded to the child's questionnaire only two produced results which were statistically significant. Consequently, any trends in the data must be interpreted extremely cautiously to avoid drawing any concrete conclusions on the basis of these trends since they are not reliable and could have occurred by chance alone.

ii. Two Parent Families

For all three Cottages fourteen two parent families were available for analysis and comparison. Of these two parent families, three of the families had some data missing with two probes available on four of the six parents involved in these three families. Two of the fourteen families had four probes available while the balance of the nine families all had three probes available for each parent.

Parental Perceptions of Behaviour

Of the fourteen fathers who responded to the first questionnaire, eleven reported an improvement in their child's behaviour between the completion of Probe 1 and the completion of Probe 2. Two of the remaining fathers reported a deterioration in the child's behaviour between Probes 1 and 2, while the third father did not have data available for this time period.

Once the analysis is extended to include further time periods, the data becomes somewhat more confusing. Three fathers did not have data available for the time period between Probes 2 and 3. Of the remaining nine on whom data was available, six of the fathers indicated that their child's behaviour began to deteriorate once the child was returned home and the family was transferred to the Access program. One father responded that the child's behaviour remained static. Two fathers indicated that their child's behaviour continued to improve between Probes 2 and 3. It is interesting to note that two of the fathers who initially reported a deterioration in their child's behaviour between Probes 1 and 2 reported that their child's behaviour improved between Probes 2 and 3.

When the two cases on which a fourth probe is available are examined, reverse trends appear in the time period between Probes 3 and 4. One father reports his child's behaviour as improving between Probe 3 and 4, or discharge and follow-up, while the second father reported his child's behaviour deteriorating. As a result, these trends seem to counteract one another.

In interpreting these results, it is again possible to speculate that for a significant number of parents a honeymoon period existed between the

first and second probes during which time the child is out of the family. Once the reality of the child returning home occurs then families seem to be equally divided on assessing their child's behaviour. The trend in these fathers in assessing their child's behaviour appears to reflect similar trends in single parent families that records a decline in the behaviour after the transfer to Access occurs. Thus, the trends regarding the transfer to Access and its affect on the assessment of behaviour continued to exist.

Once again in examining the mothers' responses to these particular cases it is possible to observe that in the mothers' assessment in eleven of the twelve cases the child's behaviour improved during the time period between the first probe and the transfer to Access probe. Only one case reported a deterioration in the child's behaviour during this time period.

Once the examination is extended to the time period between Probes 2 and 3, eleven families are available for analysis. Eight mothers reported a continued improvement in their child's behaviour during the time between the transfer to Access and the completion of the discharge probe. However it is worth noting that in five of these cases the mothers report only slight improvement in their child's behaviour between the second and third probes. Four mothers reported that their child's behaviour deteriorated once the transfer to Access occurred. When the trends are extended to consider the three parents on whom a fourth probe is available, two reported the child's behaviour as improved after discharge and at the six month follow-up. The third mother, however, reported a continuing deterioration in her child's behaviour which began at the transfer to Access and apparently continued throughout the remainder of the child's

life at home - through the Access program, discharge and follow-up.

In examining the trends in this particular data, it appears that more mothers are willing to indicate that their child's behaviour continues to improve after the transfer to Access occurs. This improvement differs somewhat from the reported results of single parents, where mothers reported equally that their child's behaviour deteriorated after transfer to Access.

Parental Perceptions of Self

In completing the questionnaire on parenting, once again eleven fathers had data available during the first phase of treatment, i.e. between Probes 1 and 2. In interpreting these results from the trends in the data, six of the eleven fathers reported an increase in their sense of self confidence about parenting. The remaining five of the eleven reported that their feelings about parenting deteriorated during the time that they had contact with the Children's Foundation through the admission of their child to the Foundation.

When the examination is extended to consider the nine families on whom data is available between Probes 2 and 3, three fathers reported a continuing improvement in their self esteem and confidence in parenting. The remaining six parents reflect a deterioration in their feelings about parenting during this time period.

When the two cases are examined on which a fourth probe is available, one father reports an improvement in his feelings about parenting while a second father reports a deterioration. It is worth noting that the father reporting a deterioration in his feelings about parenting produced

statistically significant results in his response to the parenting questionnaire. Only four of these cases produced statistically significant results which further restricts the usefulness of this interpretation of the data.

In examining the mothers' responses to this particular questionnaire, nine of the mothers felt that their feelings about parenting improved during the time period between the completion of the initial probe and the transfer to Access probe. Five mothers, on the other hand, indicated a deterioration in their feelings about their effectiveness as parents during this time period.

Once the analysis is extended to cover the eleven parents on whom data is available for the time period between Probes 2 and 3, five parents reported a deterioration in their feelings about parenting during this time period. Six parents, on the other hand, reported an improved sense of their role as parents during this time period. In interpreting these results it is important to note that only three of the mothers reported results that were statistically significant. As a result, any of the trends interpreted from this data must be viewed cautiously. Once the analysis is extended to consider the fourth time period between Probes 3 and 4, two of the three mothers reported an improved sense of self confidence in their parenting role. The third mother reported a deterioration in her self confidence as a parent. One of these mothers produced results which were statistically significant.

Child's Perceptions of Self

In examining these twelve cases for the child's responses to these

questionnaires it is important to note that three of the twelve children produced statistical results which were significant while the remaining nine produced results which were insignificant. As a result, this affects the interpretation that may be attached to this data by this research project. Much of this interpretation is at best speculative.

In interpreting the results, it is worth noting that between Probes 1 and 2, nine children reported that they felt their feelings of self confidence and self worth improved during this time period. The remaining three children reported a deterioration in their sense of self confidence during this time period.

Once the analysis is extended to consider those cases on which data is available between Probes 2 and 3, the results are somewhat different. Two children did not have data available for this time period. Of the remaining ten children, five reported a continued improvement in their feelings about themselves. Three children reported a deterioration in their feelings of self confidence. Two children reported a stabilization in their feelings about themselves. Finally, when the analysis is extended to consider those children for whom a fourth probe is available, one child reported a continued improvement in his sense of self confidence while two children reported a deterioration.

It is important to note that of the two children who reported deterioration in their feelings of self confidence, one child reported results which were statistically significant. As a result, this trend can be regarded with some degree of certainty. Once again, since the majority of the results were not statistically significant, extreme caution must be used in interpreting these results in the trends observed in the data.

b. Comparative Analysis of Pre-Test Data

As indicated earlier in this research project this researcher agreed to provide an initial analysis of the pre-test data for comparison with the analysis presented in this research report. As a result, it is worth reviewing a paper published by the agency evaluator entitled "Abstract of Exploratory Study". In this short summary of the results of his pre-test data, the agency evaluator summarizes the results on twenty-eight families involving forty-two parents and twenty-eight children. This data was collected between October 1977, and March 1978 and involved three groups of families. The first group was used as a comparison group and consisted of fourteen families. A second group involved intake families, or families on whom intake probes were available and the third group involved agency families with an average length of stay at the agency of 7.5 months. The intake and agency family groups each had seven families.

The review of this material is necessarily brief since the initial pre-test data was taken on the basis of the five questionnaires originally developed by the agency evaluator. Consequently the comparison between these five questionnaires and the subsequent three questionnaires that were developed for the ongoing evaluation program is at best tentative. As a result it is only worth summarizing very briefly some of the apparent trends in this data.

In the first group of families involving fourteen families which were used for comparison basis only, the agency evaluator reached the following conclusions. In this particular group, husbands demonstrated more problematic responses in the first questionnaire which was involved in measuring the child's behaviour. The balance of the responses from both parents across the five questionnaires were approximately equal, which would reflect on the present series of questionnaires that only the husbands had a more problematic response rate on the child's behaviour at home. In addition, the Group 1 parents tended to have fewer problematic responses on a number of the questionnaires which is to be expected since these were assumed to be normal families without problems.

For the families who were being seen at intake the wives presented more problematic responses on the first questionnaire dealing with the child's behaviour. Since this group had not at this point received any treatment the evaluator noted that this group also tended to reflect more problematic responses from the children on their self-concept scale. In addition, this particular group demonstrated more problematic responses on the fourth questionnaire which related to parental attitudes about children

but scored less problematically on their attitudes about their own parenting skills which was a separate questionnaire. In addition, Group 2, the families seen at intake, scored the questionnaires on confidence in problem-solving more problematic for both single and two parent families than they did on the questionnaire dealing with confidence in parenting.

The third group which involved families that had been in treatment at Children's Foundation scored less problematically in a number of areas than Group 2, but more problematically than the first group, or control group. The wives in Group 3 responded more problematically to the third questionnaire on parenting than did their husbands. However, this group responded less problematically to this particular question than the group that had not received any treatment, thus reflecting an improvement in their confidence about parenting. Interestingly enough this particular group also scored confidence in parenting more problematic than their counterparts in Group 2 who had not received any treatment. This group also scored confidence in parenting as being more problematic than their confidence in problem-solving, which was a reverse trend in the untreated group, or Group 2. As a result it appeared from these results that the group who had received treatment became more aware of the problems they face in their confidence around their parenting roles, but increased their confidence in their problem-solving abilities.

Finally, the children in responding to the second questionnaire in this particular pre-test, responded with fewer problematic items than the children in Group 2.

As a result it appeared to suggest that the overall family functioning improved in a number of areas as a result of treatment and deteriorated in a number of other areas. For instance, in the treated group the problematic areas of parenting changed once the group had entered treatment. As a result this appeared to indicate that parents perhaps became more aware of some of the difficulties that they faced in being parents than they were prior to admission to the Children's Foundation.

For the comparison between these results and those obtained by this research project and the analysis of the Children's Foundation data is particularly problematic. Since the analysis presented by the agency evaluator is a comparative analysis it becomes problematic in making a direct comparison between this analysis and the single-case analysis presented by this researcher. However, it is possible to comment on a number of the trends that the agency evaluator initially identified and similar trends in the data from this research project.

Initially the agency evaluator reported that parents from the control group responded less problematically to the first questionnaire on the parents' perceptions of the child's behaviour than did those parents from the second and third groups, or intake and treated groups. When the analysis is extended to examine the groups more specifically, the agency evaluator found that the problematic responses for the second group of individuals were higher than for the third group which had received treatment. This is not surprising in reviewing the data obtained from this research project, since in a majority of cases the parents' perceptions of the child's behaviour does improve over time at least while the child is in the

Children's Foundation as a resident. The crucial issue, of course, is whether this change in behaviour is maintained across time and the results here vary.

The agency evaluator also compared Questionnaires 3 and 4 which were designed to tap the parents' confidence in problem-solving and in parenting and their attitudes towards parenting and children. These two questionnaires were combined after the initial pre-test was run into the current second questionnaire which tests three of these aspects of parenting. As a result, the comparison between the results for Questionnaire 2 and these two questionnaires is possible.

Briefly, the agency evaluator noted that Group 3 tended to respond less problematically than Group 2 to the questionnaire on attitudes to parenting in one area and more problematically than Group 2 on attitudes to children. As a result the pre-test suggests that as the families went through treatment, parents began to find they were forced to re-examine their attitudes about parenting and therefore found these attitudes more problematic than they did in their attitudes about children.

In this current research project, a trend tends to exist which demonstrates that parents' attitudes about parenting and children tend to deteriorate once the child is returned home. As a result, the initial positive responses that might have been obtained through the original pre-test are not indicative of the apparent trend in the group once the group has been in treatment. While the pre-test group might score certain areas of parenting roles more positively than the treated group, the reality over the treatment

time period begins to suggest that parents do have some difficulty in dealing with their parenting roles once the child returns home. As a result this suggests that maintenance over time continues to be a problem for these parents. Overall, in comparison with the general finding of the pre-test, the results here suggest that the treated parents may respond more negatively to their questions about parenting than those parents who have not been treated. This could be as a result of a recognition on the parts of these parents of some of the difficulties they face in dealing with the child at home.

A final comparison that is possible is a comparison between the child's scores on these questionnaires. In the case of the children analyzed in the pre-test, the agency evaluator found that the treated group of children tended to respond less problematically than did the untreated group. Once the analysis is extended over time and this research project looked at those children on whom three or more probes were available, the responses from children tended to be approximately equal in their feelings about themselves. As a result this research project suggests that for treated children their feelings about themselves do not necessarily improve and maintain an improved state of existence across time. By the time the third probes are analyzed once the child is discharged from the Children's Foundation, approximately half the children report a deterioration in their feelings about themselves.

As indicated all the way along, a number of these interpretations are particularly problematic due to the lack of statistically significant data. However, these trends suggest further areas for study at the Children's

Foundation. Consequently, the comparisons that are made between the pre-test data and this data, although very tentative, do suggest some further areas for comparison that might be done through a group comparative approach. This research project did not undertake such an approach since it was the focus of this project to encourage the Children's Foundation to look more specifically at a single-case approach. While the group trends might be of interest to the agency in analyzing their data, this researcher feels very strongly that the single-case analysis presented here offers the greatest opportunity for providing more effective treatment services to both the family and the child. The only difficulties that currently exist are in the data collection techniques used at the Children's Foundation, since a paucity of data frequently exists on many of the families studied in this research project.

E. Conclusions and Recommendations

The section in this chapter on the analysis of the data and the Appendix on single-case analysis present many of the conclusions admirably. The analysis presented in these two areas of the research project present many of the advantages that the single-case approach to data analysis would provide the Children's Foundation. Through a process of analysis at the single-case level, this researcher provides the Children's Foundation with some important questions to pursue in further research projects. While the results on individual cases may be disappointing in some instances, this researcher hastens to add that these individual results are significant for the Children's Foundation in examining both the evaluation project that it is using and its current treatment techniques. As a result, this single-case analysis provides future directions for the agency in developing its evaluation project in order to enable it to answer some of the questions raised by this research project.

Specific Conclusions

A. Single-case Analysis

It is the feeling of this researcher that this approach to the data has demonstrated that the agency evaluation project can produce useful data for its staff in planning interventions with family and specific policy changes. The single-case analysis allows staff to compare the results of the data analysis with agency case records and staff recollections about the individual child and his family. This comparison process will provide staff with further insights into additional factors that may be incorporated into the evaluation project, and which may also be operating in many of these families.

As demonstrated in the analysis of this data, it is still possible to use single-case data to make comparative or descriptive types of analyses as indicated in the literature review section of this research project. As suggested by some of the authors in the literature survey, single-case analysis can be used to build theories or test theories while concentrating on providing services to clients. The results of single-case analysis can be used over time to build better theories of family behaviour or contribute to the methods of working with families.

B. The Evaluation Project

The results of this data analysis suggest further areas for exploration in the agency.

i. Questionnaire Construction

The results of the data analysis demonstrate that Questionnaire 1 produces results which are useful in understanding the parents' views of their child's behaviour. Specifically in the analysis of the data this researcher feels that the following changes should be made in this particular series of questionnaires.

a. Questionnaire 1 should be modified to exclude the use of the 'other' category, since this is so seldom used by parents. It only adds one more dimension to the overall purview of the questionnaire and by experience parents do not take advantage of this particular category.

b. Questionnaire 2 should be modified significantly to improve the results that this questionnaire obtains for parents. The present questionnaire did produce some significant results in the cases analyzed, but these were few and far between (seventeen of the fifty-two cases produced statistically significant results). As a result, this researcher feels that additional work on this particular questionnaire will provide more valid data which will assist in planning for and working with families.

c. Questionnaire 3 should be redesigned completely and expanded since it produced only one or two significant results across the thirty-eight cases analyzed. Consequently, at the present time this particular questionnaire is not providing any useful data for the agency.

ii. Data Recording

The recording of the data and the transferring of these scores from the questionnaire could be significantly simplified for both agency treatment and clerical staff combined. The laborious process of transposing the answers from each questionnaire to a data record sheet could be simplified simply by having only the totals for each question transferred to a data sheet. The totals can then be used for the calculations presented in this research project or in a number of other types of project.

In addition, the process of keeping scores in a chronological order by case would simplify the searching of agency records for future data analysis projects. This researcher experienced some difficulty in locating and identifying cases on which sufficient scores were available for analysis. As a result simplifying this process will make the data more available to anyone in the agency who wishes to examine it or to run statistical tests on the data to determine any trends in the agency data.

iii. Standardization of Data Collection Procedures

The agency must seriously look at ensuring that a standardized approach is adopted towards the completion of the questionnaires. This represents the need to train staff in adopting a standard format in presenting the questionnaires to families and in ensuring that they are completed. The frequent absence of scores or missing probes suggests that the questionnaires are not being administered as routinely as perhaps they should be, since a number of cases in which the child is still in residence at the Children's Foundation did not produce results for Probe 2. Consequently, it appears that in some cases the questionnaires are not being completed or are being lost in the

agency record keeping system, since the data that should be available while the child is a resident in the Children's Foundation appears to be unavailable. In addition, this researcher wondered how the third probe was being administered to families. In some cases it appeared that families completed the third probe at a family session when the child was being discharged. In other cases it appeared that this probe had to be mailed out to the families since it was not completed at that point in time. Consequently, this again raises questions about the standardization of the data recording system and questionnaire completion at the agency.

iv. Questionnaire Return Rate

The agency must also look at attempting to increase the return rate on follow-up probes. While there were only a few families that were apparently available for the follow-up probes, the rate of return was significantly low. As a result it appears that families once discharged from the Children's Foundation, are less likely to complete the follow-up probe if it is mailed out to them. This might be one area where the agency can look at the use of volunteers or students in obtaining the follow-up probes through visiting the family. As the original goal of this particular evaluation project was an attempt to obtain more information on families on follow-up, the availability of follow-up questionnaires appears to indicate that this particular goal is not being met at all.

v. Reliability and Validity Checks

One of the present weaknesses of the evaluation project is the lack of reliability and validity checks for the data that is collected. Once the instruments were designed a control sample should have been asked to complete

the questionnaires at routine points in time to check their reliability. Some of the changes observed in the tests may be due to extraneous factors discussed in the literature. On the other hand, many of the more positive results of treatment may be obscured by these same factors which result in the agency's true impact on changing family dynamics may be unavailable.

In addition the agency has abundant material that could be used in the evaluation project to provide more concrete measures of the child's behaviour over time. Items such as Cottage behaviour charts, reports from other agency staff, et cetera, could be included in the evaluation project to increase the reliability and validity of the results that the agency obtains. In addition, the agency should look at methods of developing cross-checks on parental attitudes. The present evaluation project relies entirely upon self-report data, or the reports of parents on children. As a result there is a danger of bias from these perspectives, since no cross-checks are presently being made on the reliability of this type of self-report data.

The inclusion of systematic Cottage recording would further assist the dimension of including Cottage staff in the evaluation project. This has implications from the survey of staff reactions in terms of their commitment and involvement in this project (see Chapter III: Conclusions). At present the evaluation project is too reliant on the parental views of themselves and their children and on the child's view of his own behaviour. The addition of cross-checks from both the Cottage and other community agencies where possible would increase the reliability and validity of this research project.

C. Case History Material

Finally the evaluation project should also consider a method of including some case material from the case histories of each individual family that comes to the agency. Chapter III suggests that gate keeping decisions of an agency can affect its outcome. Since this researcher suspects that the Children's Foundation is the last stop for many troubled children and their families, it is important to identify factors that affect outcome. As a result, this last stop syndrome is one factor that will affect the outcomes of treatment. These difficult children and their families may not be expected to improve over time or may demonstrate improvement over time which testifies even more so to the ability of this particular agency to provide treatment for difficult families.

The inclusion of case history material and additional biographic and demographic data will improve case decision making processes, may even speed this decision making process and will also contribute significantly to the understanding of how to help these very difficult families. Since the Children's Foundation is likely to be the last stop for these families, staff must be aware that any results they obtain in working with families and children are significant.

These are a number of the specific suggestions that this researcher feels will improve the evaluation project at this agency. These suggestions are made with a note of optimism since it is felt that this evaluation project should not be abandoned, but should be improved. It has raised a number of issues and questions about families. These questions need to be answered

and the present project has made a number of steps towards answering some of these findings. To change direction now would be to commit the cardinal sin of "throwing the baby out with the bath water".

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APPENDIX 1

REQUEST FOR ETHICAL REVIEW OF ACTIVITIES INVOLVING HUMAN SUBJECTS IN
QUESTIONNAIRES, INTERVIEWS, OBSERVATIONS, TESTING, VIDEO & AUDIO TAPES ETC.

* THIS FORM MUST BE TYPEWRITTEN *

1 PRINCIPAL INVESTIGATOR (or faculty advisor)	3 DEPARTMENT or FACULTY	4
Dr. John Crane	Social Work	
2 STUDENT OR CO-INVESTIGATOR(S) (if applicable)	5 GRANTING AGENCY	6 PROJECT PERIOD
Wm. Michael Stockdale	N/A	April - June 1982
7 TITLE OF PROJECT		
Introducing program Evaluation into a Small Agency: A Case Study		
8 PURPOSE AND OBJECTIVES OF PROJECT (must be complete in this space)		
<p>The purpose of this research project is twofold.</p> <p>(1) <u>Case Study</u> The research project assumes the form of an individual case study of a residential treatment facility for disturbed adolescents ages 6 to 12. The research project studies the introduction of a system of program evaluation as it was introduced into the daily operations of the agency. The purpose of the research project is to review the process through which the agency implemented its program evaluation project and the experiences of agency staff during the time that this project was being implemented. The research study will examine the issues that arose when the agency developed its evaluation project. It will also review and analyze through a staff questionnaire the feelings of the staff about how the project was implemented at the agency.</p> <p>(2) <u>Preliminary Data Analysis</u> The research project will also develop a new method of data analysis for the data that the agency has collected as a result of its evaluation project. The research project will then share this data analysis with the staff at the agency.</p>		
9 SIGNATURES		10 DATE
Principal Investigator or Faculty Advisor		March 18, 1982
Student or Co-Investigator(s) (if applicable)		
Department Head or Dean		

11 HOW MANY SUBJECTS WILL BE USED?	A number of agency staff will complete a questionnaire. No clients will be involved in the research project.
12 WHO IS BEING RECRUITED?	Agency Staff only.
13 HOW ARE THE SUBJECTS BEING RECRUITED AND SELECTED? (if initial contact is by letter, attach a copy; UBC policies prohibit initial contact by telephone)	Agency staff who were employed by the agency at the time that the evaluation project was introduced to the agency will complete a questionnaire. Only staff who are still employed at the agency are to complete the questionnaire.
14 WHAT ARE THE CRITERIA FOR THEIR SELECTION?	All staff who worked at the agency in 1977 and who still work for the agency will be asked to complete the questionnaire.

DESCRIPTION OF METHODOLOGY AND PROCEDURES

15 SUMMARY (must be complete in this space)	<p><u>(1) Case Study</u> The research project consists of a case study of the agency to examine the introduction and development of a method of program evaluation. The focus of the research project is to examine staff perceptions and feelings about the evaluation project and its impact on their work at the agency. The research project will also share with agency staff a review of the literature related to program evaluation to assist them in understanding some of the merits and generalized benefits of evaluation projects. It will also identify particular areas of the evaluative instrument which may be improved or altered to provide the agency with more adequate data for staff.</p> <p><u>(2) Preliminary Data Analysis</u> In addition to examining the process of introducing program evaluation into an agency, the research project will assist the agency in analyzing and examining some of the outcome data that staff have collected in the last year of operation. It will feed this data back to staff with suggestions as to the interpretations and implications of the data for the staff and the agency.</p>
16 WHERE WILL THE PROJECT BE CONDUCTED? (room or area)	At the agency.
17 WHO WILL ACTUALLY CONDUCT THE STUDY? (e.g. principal investigator, assistants)	The co-researcher will collect the data from agency staff. The co-investigator will collate data that agency staff have already collected from agency clients.
18 HOW WILL THE PROJECT BE EXPLAINED TO THE SUBJECTS?	The project is being explained to agency staff as a case study of the development of an evaluation project in a small agency. Agency staff are also being told that the research project will analyze the data that they have collected from clients during the operation of the project.

The preliminary data analysis is examining data that staff collect from clients as part of the routine record keeping of the agency. This data is pre-coded by the agency for statistical analysis.

- 19 HOW WILL YOU MAKE IT CLEAR TO THE SUBJECTS THAT THEIR PARTICIPATION IS VOLUNTARY AND THAT THEY MAY WITHDRAW FROM THE STUDY AT ANY TIME THEY WISH TO DISCONTINUE PARTICIPATION?

Agency staff are free to withdraw from the research project at any time as the introduction to the questionnaire indicates (copy enclosed).
The agency is also able to terminate the project at any time.

- 20 WILL YOUR PROJECT UTILIZE: (check)

- ☒ QUESTIONNAIRES (submit a copy)
☐ INTERVIEWS (submit sample of questions)
☐ OBSERVATIONS (submit a brief description)
☐ TESTS (submit a brief description)

DATA

- 21 WHO WILL HAVE ACCESS TO THE GATHERED DATA? (e.g., committee members, government agencies, others. Please specify.)

Researcher, committee, members of agency staff

- 22 HOW WILL CONFIDENTIALITY OF THE DATA BE MAINTAINED? The data collected from agency staff questionnaires will be completed anonymously through group interviews.

Client data is pre-coded for data entry.

- 23 HOW WILL THE DATA BE RECORDED? (instruments, notes, etc.)

Agency staff data will be recorded on unmarked response sheets (copy enclosed).
Client data collected by the agency is recorded as part of routine record keeping

- 24 WHAT ARE THE PLANS FOR FUTURE USE OF DATA AS PART OF THIS STUDY OR USE BEYOND THIS STUDY? at the agency.

The agency staff hope to use data analysis of client data to improve both their services to clients and their evaluative instruments. The evaluator hopes to

- 25 HOW WILL THE DATA BE DESTROYED AND WHEN? learn from staff feedback how the project at the agency affected their work at the agency.

The agency will continue to collect and retain its routine records on clients which will not be destroyed.

- BENEFITS, COSTS, RISKS
Completed staff questionnaires will be destroyed after they are compiled and analyzed.

- 26 WHAT ARE THE POTENTIAL BENEFITS TO THE SUBJECTS? The benefits of staff questionnaires are to provide staff with feedback regarding the implementation of the evaluation project. Client data will be used to improve services at the agency.

- 27 WHAT MAY BE REVEALED THAT IS NOT CURRENTLY KNOWN?

The impact of evaluation on staff at an agency.

The outcome results of treatment for emotionally disturbed children at the agency.

- 28 WHAT MONETARY COMPENSATION IS OFFERED TO THE SUBJECTS?

None.

- 29 WHAT ARE THE COSTS TO THE SUBJECTS? (monetary, time)

None.

- 30 WHAT RISKS TO THE SUBJECT ARE MOST LIKELY TO BE ENCOUNTERED? (e.g. physical, psychological, sociological)

None.

- 31 WHAT APPROACH WILL YOU TAKE TO MINIMIZE THE RISKS?

Not applicable.

32 WHO WILL CONSENT? (check)

- ☐ SUBJECT
- ☐ PARENT/GUARDIAN
- ☒ AGENCY OFFICIAL(S) (specify: e.g. school board, hospital director etc.)

The agency staff and the agency administrator will consent to participation in the questionnaire completion.

The parent or guardian of children at the agency consent to the evaluation project data collection routines as part of the routine record keeping at the agency.

33 WHAT IS THE COMPETENCE OF THE SUBJECT TO CONSENT?

Good.

34 HOW WILL THE CONSENT FORMS OR QUESTIONNAIRES BE EXPLAINED TO THE SUBJECTS? (consider language or any other barrier)

See attached Staff Questionnaire Information sheet.

35 QUESTIONNAIRES

THE INTRODUCTORY PARAGRAPH HEADING THE QUESTIONNAIRE SHOULD PROVIDE A BRIEF SUMMARY THAT INDICATES THE PURPOSE OF THE PROJECT, THE BENEFITS TO BE DERIVED & A FULL DESCRIPTION OF THE PROCEDURES TO BE CARRIED OUT IN WHICH THE SUBJECTS ARE INVOLVED. THE FREEDOM OF THE SUBJECT TO WITHDRAW AT ANY TIME OR TO REFUSE TO ANSWER ANY QUESTIONS WITHOUT PREJUDICE AND THE AMOUNT OF TIME REQUIRED OF THE SUBJECT MUST BE STATED.

INCLUDE THE STATEMENT THAT IF THE QUESTIONNAIRE IS COMPLETED IT WILL BE ASSUMED THAT CONSENT HAS BEEN GIVEN.

FOR SURVEYS CIRCULATED BY MAIL SUBMIT A COPY OF THE EXPLANATORY LETTER AS WELL AS A COPY OF THE QUESTIONNAIRE

36 WRITTEN CONSENT (other than questionnaires - e.g., experiments, interviews, case studies)

UBC POLICY REQUIRES WRITTEN CONSENT IN ALL CASES. THE CONSENT FORM SHOULD CONTAIN ALL THE INFORMATION SUMMARIZED UNDER QUESTIONNAIRES ABOVE OR, IF AN ORAL PRESENTATION IS PLANNED, A SHORT STATEMENT OF WHAT WILL BE SAID SHOULD BE PROVIDED. IN EITHER CASE THE CONSENT FORM MUST INCLUDE A STATEMENT OF THE SUBJECT'S RIGHT TO WITHDRAW AT ANY TIME AND A STATEMENT THAT WITHDRAWAL WILL NOT PREJUDICE FURTHER TREATMENT, MEDICAL CARE OR INFLUENCE CLASS STANDING AS APPLICABLE.

SUBMIT A COPY OF ALL CONSENT FORMS

37 AGENCY CONSENT

IN THE CASE OF PROJECTS CARRIED OUT AT OTHER INSTITUTIONS, THE COMMITTEE REQUIRES WRITTEN PROOF THAT AGENCY CONSENT HAS BEEN RECEIVED. SOME EXAMPLES ARE:

- Research carried out in a hospital - approval of hospital research or ethics committee
- Research carried out in a school - approval of School Board and/or Principal
- Research carried out in a Provincial Health Agency - approval of Deputy Minister

CHECKLIST OF ATTACHMENTS TO THIS SUBMISSION

38 CHECK ITEMS ATTACHED TO THIS SUBMISSION (incomplete submissions will not be considered)

- ☐ LETTER OF INITIAL CONTACT (item 13)
- ☒ QUESTIONNAIRES (items 20, 35)
- ☐ INTERVIEW QUESTIONS (item 20)
- ☐ DESCRIPTION OF OBSERVATIONS (item 20)
- ☐ TEST DESCRIPTION (item 20)
- ☒ EXPLANATORY LETTER WITH QUESTIONNAIRE (item 35)
- ☐ SUBJECT CONSENT FORM (item 32, 35, 36)
- ☐ PARENT/GUARDIAN CONSENT FORM (item 32, 36)
- ☒ AGENCY CONSENT (item 32, 37)

MESSAGE FROM DOYLE CLIFTON

Doyle Clifton, who was responsible for the design and implementation of the evaluation project in the agency, will be presenting a taped message to staff indicating his support of the present study. The purpose of Doyle's message will be to allay staff fears that they may be unfairly grading him as an evaluator. On the other hand Doyle has reviewed the present questionnaire and is in support of it in its present form. He is interested in obtaining feedback from the staff at the Foundation about the introduction of the project into the agency.

APPENDIX 2

STAFF QUESTIONNAIRE INFORMATION

Prior to beginning this questionnaire, I want to provide staff with some information regarding the purpose of the questionnaire and the nature of staff participation in it.

The purpose of the questionnaire is to explore the impact of the introduction of Program Evaluation on staff at the Children's Foundation. The questionnaire explores staff experiences as they remember them at the time that the Program Evaluation project began. It also explores staff concerns about the evaluation project and its impact on their work at the agency.

The important points for you to remember regarding the questionnaire and your participation in it are as follows:

1. Your participation is completely voluntary. You are not required to participate in the completion of the questionnaire. Should you decide not to participate you will not be subject to any disciplinary action as a member of staff at the agency.
2. Should you decide to participate in the completion of the questionnaire, you may withdraw from the exercise at any time you choose. In addition you may choose not to answer any question.
3. All your responses on the questionnaire are confidential and anonymous. The exact responses you give will not be released to the agency other than in a summarized form. Your responses will be compiled and presented in a final report which will be available to all staff. Because the questionnaire involves multiple choice answers, you will not be asked to provide responses which might be quoted in the final report.

In addition Doyle Clifton has some information for you regarding the nature of the questionnaire and the questions being asked.

MESSAGE FROM DOYLE CLIFTON

Prior to this questionnaire being presented to you, I spent some time with Mike reviewing it. The questions that he asks in this questionnaire are of interest to me because they provide feedback - ever heard me use that word before? They provide me with feedback, 1) on the actual implementation of the program evaluation project, and, 2) about how I, as the research associate back in those days, was able to address some of your concerns about this thing called evaluation, what it meant for people individually and what it meant for the agency as a whole.

I am supportive of this review process that Mike is conducting, and I am pleased that he chose the implementation of our evaluation project as a focus of his thesis.

QUESTIONNAIRE SCHEDULE

For the purposes of this questionnaire, I want you to think back to early 1977 when the Children's Foundation first began to discuss the implementation of the Program Evaluation Project. If you remember, Doyle Clifton was involved in attempting to help staff formulate ideas and suggestions regarding the format of the project. Doyle also prepared a series of short progress reports to keep staff abreast of developments in the project.

To assist you in recalling the atmosphere at the agency in 1977, Doyle will read excerpts from his reports. After each excerpt I will read a series of statements that relate to your feelings about the evaluation project at the time. You have a set of unmarked response sheets on which you will find the excerpt along with a series of categories which correspond to the statements that I will be reading you. Each series ranges from STRONGLY AGREE to STRONGLY DISAGREE. When I read each statement, I want you to mark the category which you feel most adequately reflects your feelings about the evaluation project in 1977. Again, it is important to remember that these statements relate to your feelings about the project in 1977.

What follows, is a brief attempt to pull together ideas, suggestions and concerns that we have shared over the past few months. By bringing them together into a short progress report, we are able to take a more systematic look at the kinds of things we are doing. This, in turn, can provide us with some ideas of where to go from here. So, for these reasons, I will be looking forward to your reactions and comments on this first progress report.

AS I THINK BACK TO 1977, WHEN THE EVALUATION PROJECT WAS FIRST INTRODUCED TO STAFF, I REMEMBER FEELING THAT:

1. An evaluation of our agency would assist us in improving our services to families.
 2. The project represented an opportunity for me to be involved in defining agency goals and priorities.
 3. The project represented one more disruption to the smooth functioning of the agency.
 4. The discussions about the project contributed to a more positive working environment at the agency.
 5. The project would help us identify new alternatives for working with families.
 6. I was unable to understand the purpose of the project.
-

The most important concern of many of us, was the lack of information on how families were doing after discharge.

7. I believed that a follow-up study on our treatment program would assist us in planning for families.

8. I was concerned about how families were doing after discharge.

9. I wanted more information on families after discharge.

10. I was concerned about what would happen to our program if families were shown to be doing poorly after discharge.

11. I was interested in participating in a project that would evaluate the success of my work with families.

"Do families maintain what we teach them?" This question becomes even more important for us as a result of the findings on maintenance being published in the literature. The literature is beginning to tell us that parents and children do not maintain what they have been taught when they are no longer in the "learning" environment. More importantly, generalization across environments is not happening as well as it was hoped.

12. I believed that the literature reports on treatment outcomes did not reflect the results of our program.

IN VIEW OF WHAT THE LITERATURE WAS SAYING ABOUT THE LACK OF SUCCESS OF TREATMENT PROGRAMS,

13. I was pessimistic about the effectiveness of our parent training program.

14. I was interested in evaluating the agency's program.

A second concern we discussed, was related to the communication flow around agency goals and priorities. We have not always been clear about what some of them are, nor have we been clear on the preciseness of those we do know.

15. I was concerned about the amount of time that the discussions about the project took away from our work.

16. Perhaps the most valuable part of the project was the staff discussion that occurred.

17. I was frustrated with the discussions about the project.

18. I was hesitant about expressing many of my negative reactions to the project.

AS A RESULT OF THE DISCUSSIONS ABOUT AGENCY GOALS AND PRIORITIES, I FELT THAT:

19. The project encouraged us to re-examine some of the agency goals.

20. An evaluation of the agency should be initiated.

21. The project would provide direction for treating families.

22. I was able to resolve the uncertainties that I had about the project.

23. The agency needed to help staff re-define the goals of treatment.

24. The project was needed to help re-establish the goals of the agency.

25. The implementation of the project encouraged me to question agency goals.

I CAN REMEMBER NUMEROUS STAFF DISCUSSIONS DURING WHICH:

26. All the concerns and benefits of the project were discussed.
27. I was able to contribute towards the implementation of the project.
28. I expressed my concerns about the project without fear of reprisal for what I might say.
29. I was encouraged to participate in the development of the project.
30. I was never hesitant in expressing my opinion about the project.

As well, we felt that the gradual shift in residential care from two years to about six months, created a need for us to re-examine some of the agency's goals and priorities. We thought that a re-assessment and re-defining of goals plus an improvement in the communication around them, would help to establish our own priorities and expectations for decision making.

AS I THINK BACK OVER THE MANY CHANGES THAT OCCURRED IN THE AGENCY IN 1976 AND 1977, I REMEMBER FEELING THAT:

31. The agency had lost sight of its goals and priorities.
32. Changes had occurred in the past without staff involvement.
33. The project would collect evidence to demonstrate that some of the recent changes in the agency were detrimental to the program.
34. Changes in agency policy had occurred in a haphazard way.

35. The project would demonstrate the effectiveness of our program.

36. I would be unable to influence the development of the project.

One way of viewing what we want to do would be to hire someone from outside the agency to come in and look at our program. He would then make his suggestions, write up a report and then leave.

AS WE DISCUSSED WHO SHOULD DO THE EVALUATION OF OUR AGENCY, I CAN REMEMBER THINKING THAT:

37. I had very ambivalent feelings about participating in the project.

38. I did not believe an outside evaluator would be as open to staff participation as an in-house person would be.

39. It was important to involve all the staff in designing the project.

40. We should use an internal evaluator for our project.

ONCE WE REACHED THE DECISION TO USE AN IN-HOUSE EVALUATOR AND HE STARTED TO WORK ON THE PROJECT, I REMEMBER THAT:

41. The idea of evaluating my work encouraged me to become more involved in the project.

42. Doyle was able to resolve many of my concerns regarding the project.

43. Even Doyle had difficulty addressing all our concerns.

44. No matter how many times I talked with Doyle, I still believed there were unstated motives for the project.

45. Doyle was willing to listen to my concerns about the project.

A few people raised questions about how to improve on the services we provide for families. Even though this issue was not directly discussed with all the units, I thought it would be helpful to add it into this report. The basic point made was that with resources becoming somewhat limited, it made sense to find a means for recording how we are doing and to, perhaps, explore alternative ways of doing things, should it be necessary.

46. I cannot remember discussing the need to improve services at the agency.

47. I participated in the project reluctantly.

WHEN THE QUESTION OF IMPROVING SERVICES WAS RAISED, I THOUGHT THAT:

48. Every unit should have had the opportunity to discuss whether or not services needed to be improved.

49. The project was an attempt to document agency problems.

50. The discussions were most heated when we talked about improving services.

51. Our agency should be accountable for the services we provide families.

52. The project might reveal that I was failing with families.

AS I THINK BACK I REMEMBER THAT:

53. The idea of having my work evaluated was quite threatening.

54. I had many informal discussions with my co-workers about the project.

55. I was concerned about the impact that the project would have on my job.

56. I was interested in being involved in the project.

57. Despite the numerous meetings about the project, I still felt unclear about the purpose of the project.

58. I decided to wait and see how the project developed.

ON OCTOBER 17, 1978 DOYLE CLIFTON PRESENTED A REPORT FOR THE BOARD OF CHILDREN'S FOUNDATION IN WHICH HE SUMMARIZED THE TWO YEARS OF PROGRESS ON THE PROGRAM EVALUATION PROJECT. DOYLE IS GOING TO READ PARTS OF THIS REPORT AND I WILL PRESENT YOU WITH FURTHER STATEMENTS RELATING TO THE REPORT. I WOULD LIKE YOU TO INDICATE WHETHER YOU FEEL THAT THE STATEMENTS ACCURATELY REFLECT YOUR FEELINGS ABOUT THE PROJECT AFTER WORKING WITH IT FOR ABOUT A YEAR AND A HALF. AGAIN, I WANT YOU TO THINK BACK TO WHEN THE REPORT WAS WRITTEN TO SEE IF IT REFLECTS YOUR FEELINGS AT THE TIME THE PROJECT WAS BEING DEVELOPED.

Reasons for Evaluation

A number of factors appeared to contribute to the decision to do evaluation in the agency.

Feedback:

A more rational and objective process for deciding on and implementing change was required. As well, it was thought that on-going feedback data collected by someone other than the treatment staff, would aid the staff's case planning and provide a means of engendering a spirit of objective enquiry into treatment programs and staff's own attitudes and values.

59. I was interested in obtaining feedback on my work through the project.

60. I appreciated having feedback from the evaluator on the progress we had made with the project.

WHILE WE WERE DEVELOPING THE EVALUATION PROJECT, I FELT THAT:

61. Our working experience at Children's Foundation would be helpful to other agencies working with children.

62. The project would help us consolidate our treatment philosophy.

63. The project would offer me an opportunity to improve my helping skills.

64. The project generated alot of discussion.

65. The project would provide more insight into how to help families.

66. The project offered me an opportunity to help formulate policy for the agency.

CONTRARY TO MANY OF MY CO-WORKERS, I DID NOT BELIEVE THAT:

67. The project would provide a more objective basis for making changes in the agency.

68. The project would provide a means of making better decisions in the agency.

69. The discussions we had about the project affected the decision to implement the project.

Accountability:

Funding bodies were making and continue to make demands for more detailed data to substantiate their purchasing of any service.

70. I was pleased that the agency was conducting research into the work we do with emotionally disturbed children and their families.

71. I wanted to learn more about working with families, but was afraid that the project would put my job on the line.

72. I felt that the project would make us more accountable for our services to families.

Cutbacks:

At that particular time, residential centres were feeling exceptionally vulnerable due to many closures and severe cutbacks.

I THOUGHT THAT:

73. The project would assist me in working with families.

74. The real motives for the project were to demonstrate the effectiveness of our service and to prevent the closure of the agency.

75. The project demonstrated our willingness to review and improve our program.

APPENDIX 3

 RESPONSE SHEET

What follows is a brief attempt to pull together ideas, suggestions and concerns that we have shared over the past few months. By bringing them together into a short progress report, we are able to take a more systematic look at the kinds of things we are doing. This, in turn, can provide us with some ideas of where to go from here. So, for these reasons, I will be looking forward to your reactions and comments on this first progress report.

AS I THINK BACK TO 1977, WHEN THE EVALUATION PROJECT WAS FIRST INTRODUCED TO STAFF, I REMEMBER FEELING THAT:

Question Number	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>UNDECIDED</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
1.	1	2	3	4	5
2.	1	2	3	4	5
3.	1	2	3	4	5
4.	1	2	3	4	5
5.	1	2	3	4	5
6.	1	2	3	4	5

The most important concern of many of us, was the lack of information on how families were doing after discharge.

Question Number	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>UNDECIDED</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
7.	1	2	3	4	5
8.	1	2	3	4	5
9.	1	2	3	4	5
10.	1	2	3	4	5
11.	1	2	3	4	5

"Do families maintain what we teach them?"
 This question becomes even more important for us as a result of the findings on maintenance being published in the literature. The literature is beginning to tell us that parents and children do not maintain what they have been taught when they are no longer in the "learning" environment. More importantly, generalization across environments is not happening as well as it was hoped.

Question Number	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>UNDECIDED</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
12.	1	2	3	4	5

IN VIEW OF WHAT THE LITERATURE WAS SAYING ABOUT THE LACK OF SUCCESS OF TREATMENT PROGRAMS,

Question Number	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>UNDECIDED</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
13.	1	2	3	4	5
14.	1	2	3	4	5

A second concern we discussed, was related to the communication flow around agency goals and priorities. We have not always been clear about what some of them are, nor have we been clear on the preciseness of those we do know.

Question Number	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>UNDECIDED</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
15.	1	2	3	4	5
16.	1	2	3	4	5
17.	1	2	3	4	5
18.	1	2	3	4	5

AS A RESULT OF THE DISCUSSIONS ABOUT AGENCY GOALS AND PRIORITIES, I FELT THAT:

Question Number	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>UNDECIDED</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
19.	1	2	3	4	5
20.	1	2	3	4	5
21.	1	2	3	4	5
22.	1	2	3	4	5
23.	1	2	3	4	5
24.	1	2	3	4	5
25.	1	2	3	4	5

I CAN REMEMBER NUMEROUS STAFF DISCUSSIONS DURING WHICH:

Question Number	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>UNDECIDED</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
26.	1	2	3	4	5
27.	1	2	3	4	5
28.	1	2	3	4	5
29.	1	2	3	4	5
30.	1	2	3	4	5

As well, we felt that the gradual shift in residential care from two years to about six months, created a need for us to re-examine some of the agency's goals and priorities. We thought that a re-assessment and re-defining of goals plus an improvement in the communication around them, would help to establish our own priorities and expectations for decision making.

AS I THINK BACK OVER THE MANY CHANGES THAT OCCURRED IN THE AGENCY IN 1976 AND 1977, I REMEMBER FEELING THAT:

Question Number	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>UNDECIDED</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
31.	1	2	3	4	5
32.	1	2	3	4	5
33.	1	2	3	4	5
34.	1	2	3	4	5
35.	1	2	3	4	5
36.	1	2	3	4	5

One way of viewing what we want to do would be to hire someone from outside the agency to come in and look at our program. He would then make his suggestions, write up a report and then leave.

AS WE DISCUSSED WHO SHOULD DO THE EVALUATION OF OUR AGENCY, I CAN REMEMBER THINKING THAT:

<u>Question Number</u>	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>UNDECIDED</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
37.	1	2	3	4	5
38.	1	2	3	4	5
39.	1	2	3	4	5
40.	1	2	3	4	5

ONCE WE REACHED THE DECISION TO USE AN IN-HOUSE EVALUATOR AND HE STARTED TO WORK ON THE PROJECT, I REMEMBER THAT:

<u>Question Number</u>	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>UNDECIDED</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
41.	1	2	3	4	5
42.	1	2	3	4	5
43.	1	2	3	4	5
44.	1	2	3	4	5
45.	1	2	3	4	5

A few people raised questions about how to improve on the services we provide for families. Even though this issue was not directly discussed with all the units, I thought it would be helpful to add it into this report. The basic point made was that with resources becoming somewhat limited, it made sense to find a means for recording how we are doing and to, perhaps, explore alternative ways of doing things, should it be necessary.

<u>Question Number</u>	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>UNDECIDED</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
46.	1	2	3	4	5
47.	1	2	3	4	5

WHEN THE QUESTION OF IMPROVING SERVICES WAS RAISED, I THOUGHT THAT:

<u>Question Number</u>	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>UNDECIDED</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
48.	1	2	3	4	5
49.	1	2	3	4	5
50.	1	2	3	4	5
51.	1	2	3	4	5
52.	1	2	3	4	5

AS I THINK BACK I REMEMBER THAT:

Question Number	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>UNDECIDED</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
53.	1	2	3	4	5
54.	1	2	3	4	5
55.	1	2	3	4	5
56.	1	2	3	4	5
57.	1	2	3	4	5
58.	1	2	3	4	5

ON OCTOBER 17, 1978 DOYLE CLIFTON PRESENTED A REPORT FOR THE BOARD OF CHILDREN'S FOUNDATION IN WHICH HE SUMMARIZED THE TWO YEARS OF PROGRESS ON THE PROGRAM EVALUATION PROJECT. DOYLE IS GOING TO READ PARTS OF THIS REPORT AND I WILL PRESENT YOU WITH FURTHER STATEMENTS RELATING TO THE REPORT. I WOULD LIKE YOU TO INDICATE WHETHER YOU FEEL THAT THE STATEMENTS ACCURATELY REFLECT YOUR FEELINGS ABOUT THE PROJECT AFTER WORKING WITH IT FOR ABOUT A YEAR AND A HALF. AGAIN, I WANT YOU TO THINK BACK TO WHEN THE REPORT WAS WRITTEN TO SEE IF IT REFLECTS YOUR FEELINGS AT THE TIME THE PROJECT WAS BEING DEVELOPED.

Reasons for Evaluation

A number of factors appeared to contribute to the decision to do evaluation in the agency.

Feedback:

A more rational and objective process for deciding on and implementing change was required. As well, it was thought that on-going feedback data collected by someone other than the treatment staff, would aid the staff's case planning and provide a means of engendering a spirit of objective enquiry into treatment programs and staff's own attitudes and values.

Question Number	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>UNDECIDED</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
59.	1	2	3	4	5
60.	1	2	3	4	5

WHILE WE WERE DEVELOPING THE EVALUATION PROJECT, I FELT THAT:

Question Number	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>UNDECIDED</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
61.	1	2	3	4	5
62.	1	2	3	4	5
63.	1	2	3	4	5
64.	1	2	3	4	5
65.	1	2	3	4	5
66.	1	2	3	4	5

CONTRARY TO MANY OF MY CO-WORKERS, I DID NOT BELIEVE THAT:

Question Number	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>UNDECIDED</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
67.	1	2	3	4	5
68.	1	2	3	4	5
69.	1	2	3	4	5

Accountability:

Funding bodies were making and continue to make demands for more detailed data to substantiate their purchasing of any service.

Question Number	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>UNDECIDED</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
70.	1	2	3	4	5
71.	1	2	3	4	5
72.	1	2	3	4	5

Cutbacks:

At that particular time, residential centres were feeling exceptionally vulnerable due to many closures and severe cutbacks.

I THOUGHT THAT:

Question Number	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>UNDECIDED</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
73.	1	2	3	4	5
74.	1	2	3	4	5
75.	1	2	3	4	5

1. Current Occupational Role at Agency

1. Supervisory
2. Family Counsellor
3. Child Care Counsellor
4. Office Staff
5. Teacher
6. Other _____ (Specify)

2. Number of Years in Present Position: _____3. Occupational Role at Agency in 1977

1. Supervisory
2. Family Counsellor
3. Child Care Counsellor
4. Office Staff
5. Teacher
6. Other _____ (Specify)

4. Previous Experience with Evaluation Programs: 1. Yes 2. No

APPENDIX 4

NEED

Definition: The indications that staff see the project as truly
 valuable and needed.

Operational Definition:

 The staff responses to statements supporting the
 value and need for the project.

- 5) The project would help us identify new alternatives for working
 with families.
- 7) I believed that a follow-up study on our treatment program
 would assist us in planning for families.
- 8) I was concerned about how families were doing after discharge.
- 9) I wanted more information on families after discharge.
- 19) The project encouraged us to re-examine some of the agency goals.
- 21) The project would provide direction for treating families.
- 23) The agency needed to help staff re-define the goals of treatment.
- 25) The implementation of the project encouraged me to question
 agency goals.
- 31) The agency had lost sight of its goals and priorities.
- 34) Changes in agency policy had occurred in a haphazard way.
- 35) The project would demonstrate the effectiveness of our program.
- 62) The project would help us consolidate our treatment philosophy.
- 65) The project would provide more insight into how to help families.
- 68) The project would provide a means of making better decisions in
 the agency.
- 72) I felt that the project would make us more accountable for our
 services to families.

RESISTANCE

Definition: The disinclination of staff to support or become involved in the evaluation project.

Operational Definition:
 The staff responses to statements indicating negative feelings about being involved in the evaluation project.

- 3) The project represented one more disruption to the smooth functioning of the agency.
- 6) I was unable to understand the purpose of the project.
- 10) I was concerned about what would happen to our program if families were shown to be doing poorly after discharge.
- 13) I was pessimistic about the effectiveness of our parent training program.
- 33) The project would collect evidence to demonstrate that some of the recent changes in the agency were detrimental to the program.
- 37) I had very ambivalent feelings about participating in the project.
- 44) No matter how many times I talked with Doyle, I still believed there were unstated motives for the project.
- 47) I participated in the project reluctantly.
- 49) The project was an attempt to document agency problems.
- 52) The project might reveal that I was failing with families.
- 53) The idea of having my work evaluated was quite threatening.
- 55) I was concerned about the impact that the project would have on my job.
- 67) The project would provide a more objective basis for making changes in the agency.
- 71) I wanted to learn more about working with families, but was afraid that the project would put my job on the line.
- 74) The real motives for the project were to demonstrate the effectiveness of our service and to prevent the closure of the agency.

DISCUSSION

Definition: The occurrence of open discussion about the problems and side effects of the evaluation project.

Operational Definition: The staff responses to statements indicating the occurrence of open discussion of the problems and side effects of the project.

- 4) The discussions about the project contributed to a more positive working environment at the agency.
- 15) I was concerned about the amount of time that the discussions about the project took away from our work.
- 16) Perhaps the most valuable part of the project was the staff discussion that occurred.
- 17) I was frustrated with the discussions about the project.
- 18) I was hesitant about expressing many of my negative reactions to the project.
- 22) I was able to resolve the uncertainties that I had about the project.
- 26) All the concerns and benefits of the project were discussed.
- 28) I expressed my concerns about the project without fear of reprisal for what I might say.
- 30) I was never hesitant in expressing my opinion about the project.
- 46) I cannot remember discussing the need to improve services at the agency.
- 48) Every unit should have had the opportunity to discuss whether or not services needed to be improved.
- 50) The discussions were most heated when we talked about improving services.
- 54) I had many informal discussions with my co-workers about the project.
- 60) I appreciated having feedback from the evaluator on the progress we had made with the project.
- 64) The project generated a lot of discussion.

COMMITMENT

Definition: The willingness of staff to make a commitment to the development of the evaluation project.

Operational Definition: The staff responses to statements indicating a willingness to participate in the development of the project.

- 1) An evaluation of our agency would assist us in improving our services to families.
- 11) I was interested in participating in a project that would evaluate the success of my work with families.
- 12) I believed that the literature reports on treatment outcomes did not reflect the results of our program.
- 14) I was interested in evaluating the agency's program.
- 20) An evaluation of the agency should be initiated.
- 24) The project was needed to help re-establish the goals of the agency.
- 41) The idea of evaluating my work encouraged me to become more involved in the project.
- 42) Doyle was able to resolve many of my concerns regarding the project.
- 51) Our agency should be accountable for the services we provide families.
- 59) I was interested in obtaining feedback on my work through the project.
- 61) Our working experience at Children's Foundation would be helpful to other agencies working with children.
- 63) The project would offer me an opportunity to improve my helping skills.
- 70) I was pleased that the agency was conducting research into the work we do with emotionally disturbed children and their families.
- 73) The project would assist me in working with families.
- 75) The project demonstrated our willingness to review and improve our program.

INVOLVEMENT

Definition: Staff involvement in participative decision making in the adaptation and installation of the evaluation project.

Operational Definition:
 The responses of staff to statements indicating involvement in the adaptation and installation of the project.

- 2) The project represented an opportunity for me to be involved in defining agency goals and priorities.
- 27) I was able to contribute towards the implementation of the project.
- 29) I was encouraged to participate in the development of the project.
- 32) Changes had occurred in the past without staff involvement.
- 36) I would be unable to influence the development of the project.
- 38) I did not believe that an outside evaluator would be as open to staff participation as an in-house person would be.
- 39) It was important to involve all the staff in designing the project.
- 40) We should use an internal evaluator for our project.
- 43) Even Doyle had difficulty addressing all our concerns.
- 45) Doyle was willing to listen to my concerns about the project.
- 56) I was interested in being involved in the project.
- 57) Despite the numerous meetings about the project, I still felt unclear about the purpose of the project.
- 58) I decided to wait and see how the project developed.
- 66) The project offered me an opportunity to help formulate policy for the agency.
- 69) The discussions we had about the project affected the decision to implement the project.

APPENDIX 5

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QUESTIONNAIRE #1INSTRUCTIONS:

This questionnaire is composed of a series of statements having to do with your child's behaviour:

Example:

Child does as is told when directed to do something..... 1 2 3 4 5

Child does NOT do as told by:

- a) complaining..... 1 2 3 4 5
- b) delaying..... 1 2 3 4 5
- c) not listening..... 1 2 3 4 5
- d) arguing..... 1 2 3 4 5
- e) whining..... 1 2 3 4 5
- f) other (specify) _____

The numbers to the right of each statement represent your perception of the occurrence of the behaviour. The levels of occurrence are:

all the time	very often	often	hardly ever	never
1	2	3	4	5

You are asked to read the main statement, which in the above example is:

"Child does as told when directed to do something".

Then, circle one of the numbers to the right of the main statement. In deciding what number to circle, try to keep in mind your child's behaviour during the past 3 months. For the above example, in general does your child, "do as told when directed to do something".

If you circle 3, 4, or 5, to the right of the main statement, you are then asked to go to the statement that follows immediately below the main statement. In this example, the statement is:

"The child does not do as told by....."

Below the statement is a list of specific statements about Negative Behaviours that your child might exhibit that represent why you circled numbers 3, 4 or 5, on the main statement. Read through each item on the list and then indicate again the level of occurrence of that particular Negative Behaviour. If none of the specific Negative Behaviours are relevant to your situation, fill in "Other" to indicate what would best fit for you.

Should you circle numbers 1 or 2 on the Main Statement, do not go to the statement below it, instead, please go on to the next Main Statement.

QUESTIONNAIRE # 1

1. Child does as told when directed to do something..... 1 2 3 4 5
- Child does not do as told by:
- a) complaining..... 1 2 3 4 5
 - b) delaying..... 1 2 3 4 5
 - c) arguing..... 1 2 3 4 5
 - d) not listening..... 1 2 3 4 5
 - e) whining..... 1 2 3 4 5
 - f) withdraws..... 1 2 3 4 5
 - g) sulks..... 1 2 3 4 5
 - h) other (specify) _____
-
2. Child accepts your decision about being unable to do something.... 1 2 3 4 5
- Child does not accept your decision by:
- a) constantly nagging to get what he/she wants..... 1 2 3 4 5
 - b) having temper tantrums..... 1 2 3 4 5
 - c) withdrawing..... 1 2 3 4 5
 - d) sulking..... 1 2 3 4 5
 - e) other (specify) _____
-
3. Child can play well with others..... 1 2 3 4 5
- Child does not play well with others by:
- a) fighting..... 1 2 3 4 5
 - b) arguing..... 1 2 3 4 5
 - c) swearing..... 1 2 3 4 5
 - d) bragging; boasting..... 1 2 3 4 5
 - e) playing only by his/her rules..... 1 2 3 4 5
 - f) whining..... 1 2 3 4 5
 - g) tattling..... 1 2 3 4 5
 - h) teasing..... 1 2 3 4 5
 - i) bossiness..... 1 2 3 4 5
 - j) insulting..... 1 2 3 4 5
 - k) threatening..... 1 2 3 4 5

(continued next page)

- | | | | | | | |
|----|----------------------------|---|---|---|---|---|
| l) | refusing to share..... | 1 | 2 | 3 | 4 | 5 |
| m) | not taking turns..... | 1 | 2 | 3 | 4 | 5 |
| n) | refusing to ever help..... | 1 | 2 | 3 | 4 | 5 |
| o) | withdrawing..... | 1 | 2 | 3 | 4 | 5 |
| p) | sulking..... | 1 | 2 | 3 | 4 | 5 |
| q) | other (specify) _____ | | | | | |

4. Child gets along well with brothers and sisters..... 1 2 3 4 5
- Child does not get along well with brothers and sisters by:
- | | | | | | | |
|----|------------------------------------|---|---|---|---|---|
| a) | fighting..... | 1 | 2 | 3 | 4 | 5 |
| b) | arguing..... | 1 | 2 | 3 | 4 | 5 |
| c) | swearing..... | 1 | 2 | 3 | 4 | 5 |
| d) | bragging; boasting..... | 1 | 2 | 3 | 4 | 5 |
| e) | playing only by his/her rules..... | 1 | 2 | 3 | 4 | 5 |
| f) | whining..... | 1 | 2 | 3 | 4 | 5 |
| g) | tattling..... | 1 | 2 | 3 | 4 | 5 |
| h) | teasing..... | 1 | 2 | 3 | 4 | 5 |
| i) | bossiness..... | 1 | 2 | 3 | 4 | 5 |
| j) | insulting..... | 1 | 2 | 3 | 4 | 5 |
| k) | threatening..... | 1 | 2 | 3 | 4 | 5 |
| l) | refusing to share..... | 1 | 2 | 3 | 4 | 5 |
| m) | not taking turns..... | 1 | 2 | 3 | 4 | 5 |
| n) | refusing to ever help..... | 1 | 2 | 3 | 4 | 5 |
| o) | withdrawing..... | 1 | 2 | 3 | 4 | 5 |
| p) | sulking..... | 1 | 2 | 3 | 4 | 5 |
| q) | other (specify) _____ | | | | | |

5. Child shows respect for their own and other's belongings..... 1 2 3 4 5
- Child does not show respect for their own and other's belongings by:
- | | | | | | | |
|----|---|---|---|---|---|---|
| a) | not asking permission to borrow..... | 1 | 2 | 3 | 4 | 5 |
| b) | damaging or losing items - both their own
and/or others..... | 1 | 2 | 3 | 4 | 5 |
| c) | stealing..... | 1 | 2 | 3 | 4 | 5 |
| d) | setting fires..... | 1 | 2 | 3 | 4 | 5 |
| e) | roughhousing in nonspecified areas..... | 1 | 2 | 3 | 4 | 5 |
| f) | throwing garbage around..... | 1 | 2 | 3 | 4 | 5 |
| g) | leaving articles that belong to them lying around,
i.e., toys and clothes..... | 1 | 2 | 3 | 4 | 5 |

(continued on next page)

- h) plugging toilets and sinks with foreign objects..... 1 2 3 4 5
 i) other (specify) _____

6. Child is trustworthy and accountable for his/her behaviour..... 1 2 3 4 5
 - Child is not trustworthy and accountable for his/her behaviour by:
 a) lying..... 1 2 3 4 5
 b) cheating or changing rules to get own way..... 1 2 3 4 5
 c) not keeping his/her word around a commitment..... 1 2 3 4 5
 d) other (specify) _____

7. Child is thoughtful of others..... 1 2 3 4 5
 - Child is not thoughtful of others by:
 a) not using phrases such as "please", "thank-you",
 "good-morning", etc..... 1 2 3 4 5
 b) interrupting other's conversations..... 1 2 3 4 5
 c) making rude noises such as belching, farting, etc.,
 to annoy..... 1 2 3 4 5
 d) making unpleasant silly noises..... 1 2 3 4 5
 e) failing to greet visitors appropriately..... 1 2 3 4 5
 f) other (specify) _____

8. Child's skills for maintaining personal hygiene are adequate with
 minimum supervision..... 1 2 3 4 5
 - Child's skills are not adequate by:
 a) not washing or bathing regularly..... 1 2 3 4 5
 b) not brushing teeth..... 1 2 3 4 5
 c) not combing hair..... 1 2 3 4 5
 d) not using appropriate toilet skills, such as
 flushing toilet, using toilet paper, etc..... 1 2 3 4 5
 e) not using and disposing of sanitary napkins
 properly..... 1 2 3 4 5
 f) wearing dirty clothes..... 1 2 3 4 5
 g) soiling and/or urinating clothes..... 1 2 3 4 5
 h) keeping dirty and/or soiled clothes in
 inappropriate places..... 1 2 3 4 5
 i) not dressing appropriately for situation..... 1 2 3 4 5
 j) smearing feces..... 1 2 3 4 5
 k) other (specify) _____

9. Child eats in a manner that is healthful and pleasant for everyone involved..... 1 2 3 4 5
- Child does not eat in a manner that is healthful and pleasant for everyone involved by:
- a) being late for meals..... 1 2 3 4 5
 - b) not eating what is served..... 1 2 3 4 5
 - c) talking with their mouth full of food..... 1 2 3 4 5
 - d) talking about inappropriate subjects at mealtime.... 1 2 3 4 5
 - e) not passing things that are being asked for..... 1 2 3 4 5
 - f) being messy, i.e., slopping food on table and floors 1 2 3 4 5
 - g) other (specify) _____
-
10. Child observes the rules for punctuality concerning school..... 1 2 3 4 5
- Child does not show punctuality by:
- a) being late for school..... 1 2 3 4 5
 - b) not attending classes regularly..... 1 2 3 4 5
 - c) not returning home on time..... 1 2 3 4 5
 - d) other (specify) _____
-
11. Child completes any work brought home to do..... 1 2 3 4 5
- Child does not complete work by:
- a) not bringing work home..... 1 2 3 4 5
 - b) requiring constant supervision to do work..... 1 2 3 4 5
 - c) simply refusing to do work..... 1 2 3 4 5
 - d) pretending not to know what is supposed to be done.. 1 2 3 4 5
 - e) other (specify) _____
-
12. Child follows through on the routines that have been agreed to before hand - with minimum supervision..... 1 2 3 4 5
- Child does not follow through on agreed routines by:
- a) not getting up when called..... 1 2 3 4 5
 - b) being noisy after going to bed..... 1 2 3 4 5
 - c) not doing chores properly..... 1 2 3 4 5
 - d) not keeping room tidy..... 1 2 3 4 5
 - e) other (specify) _____

QUESTIONNAIRE # 2

Below is a series of statements about feelings around parenting. Please circle the number to the right of the statements that represents what you think about the statement. The scale is as follows:

Completely true very often true often true hardly ever true never true

5

- | | | | | | | |
|-----|---|---|---|---|---|---|
| 1. | Most problems will solve themselves if I just leave them alone..... | 1 | 2 | 3 | 4 | 5 |
| 2. | Parents should not have to participate in all the child's questionings... | 1 | 2 | 3 | 4 | 5 |
| 3. | Some parents are just plain lucky when it comes to having well behaved children..... | 1 | 2 | 3 | 4 | 5 |
| 4. | Children should be seen and not heard..... | 1 | 2 | 3 | 4 | 5 |
| 5. | Children need regular routines..... | 1 | 2 | 3 | 4 | 5 |
| 6. | Children don't require explanations for rules and decisions..... | 1 | 2 | 3 | 4 | 5 |
| 7. | My children listen to me when I direct them to do something..... | 1 | 2 | 3 | 4 | 5 |
| 8. | Some children are just bad..... | 1 | 2 | 3 | 4 | 5 |
| 9. | Planning ahead makes things turn out better..... | 1 | 2 | 3 | 4 | 5 |
| 10. | I feel that I am taken for granted by my children..... | 1 | 2 | 3 | 4 | 5 |
| 11. | Children should have few rights..... | 1 | 2 | 3 | 4 | 5 |
| 12. | Most of the time no matter how I handle my children, things never turn out right..... | 1 | 2 | 3 | 4 | 5 |
| 13. | Children should know the family rules without the parents having to explain them..... | 1 | 2 | 3 | 4 | 5 |
| 14. | When things are going to go wrong, between me and my children, they are going to happen regardless of what I try to do..... | 1 | 2 | 3 | 4 | 5 |
| 15. | Disciplining children is the father's responsibility..... | 1 | 2 | 3 | 4 | 5 |
| 16. | When good things happen between me and my children, they happen largely because of what I do..... | 1 | 2 | 3 | 4 | 5 |
| 17. | Other people have more influence on my children than I do..... | 1 | 2 | 3 | 4 | 5 |
| 18. | Children don't need set rules and consequences..... | 1 | 2 | 3 | 4 | 5 |
| 19. | I have little time for myself because of all the family demands..... | 1 | 2 | 3 | 4 | 5 |
| 20. | My life is run by my children..... | 1 | 2 | 3 | 4 | 5 |
| 21. | Parents should practice what they preach..... | 1 | 2 | 3 | 4 | 5 |
| 22. | Most of the time I can change what might happen tomorrow between me and my children by what I do today..... | 1 | 2 | 3 | 4 | 5 |
| 23. | My children respect me..... | 1 | 2 | 3 | 4 | 5 |
| 24. | Children make too many demands..... | 1 | 2 | 3 | 4 | 5 |

PROBE	FAMILY	S

QUESTIONNAIRE # 3

- Please read each of the following sentences.
- I'll help you if you should run into any difficulty!
- After you have read the sentences, circle one of the numbers to the right.

	<u>YES</u>	<u>NO</u>
1. I am well behaved in school.....	1	2
2. I am a happy person.....	1	2
3. I like being with my family.....	1	2
4. It's hard for me to make friends.....	1	2
5. When I try doing something, something always goes wrong.....	1	2
6. I get worried when we have tests in school.....	1	2
7. I am often sad.....	1	2
8. I am important to my family.....	1	2
9. I have many friends.....	1	2
10. When I try to do things, everything seems to go wrong.....	1	2
11. I am good in my school work.....	1	2
12. I am cheerful.....	1	2
13. I cause trouble to my family.....	1	2
14. Other children pick on me.....	1	2
15. I am smart.....	1	2
16. I hate school.....	1	2
17. I am unhappy.....	1	2
18. My parents expect too much of me.....	1	2
19. I would rather work or play by myself than with a group.....	1	2
20. I forget what I learn.....	1	2

THE CHILDREN'S FOUNDATIONCLIENT SATISFACTION FORM

FAMILY NAME: _____ # _____ M F

Date: _____

1. How would you describe your feelings
about seeking services at the Children's
Foundation?

very positive _____
positive _____
indifferent _____
negative _____
very negative _____

2. Were you given adequate information about
the Children's Foundation before coming to
your first meeting at the agency?

Yes _____
No _____

If "NO", what type of information would you have liked to have had?

3. Before coming to the Children's Foundation
did you feel that there was much support
in the community for you around the types
of problems you had been experiencing?

Yes _____
No _____

What do you think now about community supports for you?

4. What were the problems that led you to seek the services of the Children's
Foundation?

5.- Do you feel differently about these problems now?

much better _____
 better _____
 same _____
 worse _____
 much worse _____

6. Do you attribute this change or lack of change in feeling about the problems to the program provided by the Children's Foundation?

yes, mostly _____
 yes, partly _____
 not mostly _____
 not at all _____

If not mostly, to what (or what else) do you attribute it?

7. Were other family or child issues or concerns, other than those that caused you to seek our services originally, identified and worked on during your involvement with the Children's Foundation?

many _____
 some _____
 a few _____
 not really _____

8. Were there any services you felt you should have received and didn't?

Yes _____
 No _____

9. Is what you learned from the Children's Foundation

helpful in many situations _____
 helpful in a few situations _____
 not very helpful _____
 I didn't learn a thing _____

10. Did your experience with the Children's Foundation increase your feelings of confidence in resolving difficulties with your child(ren)?

a great deal _____
somewhat _____
not really _____

11. Would you say that your feelings about yourself as a parent are different?

Yes _____
No _____

If Yes, how would you say they are different?

a great deal better _____
somewhat better _____
worse _____

12. Since your involvement with the Children's Foundation, how do you view your child's behaviour at home?

improved _____
slightly improved _____
no change _____
a little worse _____
worse _____

13. Since your involvement with the Children's Foundation, how do you view your child's behaviour at school?

improved _____
slightly improved _____
no change _____
a little worse _____
worse _____

14. How would you rate your overall satisfaction with the services provided by the Children's Foundation?

unsatisfied 1 2 3 4 5 satisfied

15. Do you have any other general comments you would like to make concerning your involvement with the Children's Foundation?

APPENDIX 1

PROBE: _____ CHILD'S NAME: _____ DATE: _____

QUESTIONNAIRE 1:

<u>CATEGORY:</u>	<u>Mother</u>	<u>PROBLEMATIC</u>	<u>Father</u>
	<u>Score</u>		<u>Score</u>
1. Comply _____	_____	_____	_____
2. Accepting "No" _____	_____	_____	_____
3. Interaction with Peers _____	_____	_____	_____
4. Interaction with Siblings _____	_____	_____	_____
5. Use of Property _____	_____	_____	_____
6. Honesty _____	_____	_____	_____
7. Thoughtfulness _____	_____	_____	_____
8. Hygiene _____	_____	_____	_____
9. Meals _____	_____	_____	_____
10. Punctuality - School _____	_____	_____	_____
11. Homework - School _____	_____	_____	_____
12. Routines _____	_____	_____	_____
Total Score _____			

QUESTIONNAIRE 2:

<u>CATEGORY:</u>	<u>Mother</u>	<u>Father</u>
	<u>Score</u>	<u>Score</u>
1. Problem Solving _____	_____	_____
2. Parenting _____	_____	_____
3. Children _____	_____	_____
Total Score _____		

QUESTIONNAIRE 3:

<u>CATEGORY:</u>	<u>Child</u>
1. School _____	_____
2. Happiness _____	_____
3. Family _____	_____
4. Popularity _____	_____
5. Competence _____	_____
Total Score _____	

FAMILY INTERVIEW FILE RECORD SHEET

FAMILY NO: _____ CLIENT NO: _____

FAMILY: _____ UNIT: _____ COUNSELLOR: _____

MARITAL STATUS: _____ OCCUPATION: _____

Number in Family: _____ CHILDREN AGE: SEX

First Interview _____

Second Interview _____

Third Interview _____

Fourth Interview _____

Fifth Interview _____

Sixth Interview _____

Follow-Up: _____

Address: _____

PHONE: _____

REFERRING WORKER: _____ PHONE: _____

APPENDIX 6

SEQUENCE OF SCORING EVALUATION FORMS:

3 Questionnaires to come from the Family team at the following times:

- Intake (Note: Complete Face Sheet at Intake)
- Transfer to Access
- Discharge??
- Six Month Followup (Note: Mark six month due date on your calendar for six month followup questionnaire - to come from Ron Ohmart)

When Questionnaires come in at Intake: Assign Family & Client Numbers (Note: bracketed number in yellow book is client number).

- transfer responses to Response Sheets
- Re: Questionnaire #1:
 - Score responses - Note: Anything not circled on response sheet is NOT A PROBLEM therefore assign score of 1.
ANYTHING CIRCLED is problematic therefore assign score of 0.

IMPORTANT: Don't score Category Statement.

- Possible Total Score for Questionnaire #1 is 86/86 if no problems and no N/A's
- Possible Total Score for Questionnaire #2 is 24/24 if no problems and no N/A's
- Possible Total Score for Questionnaire #3 is 20/20 if no problems and no N/A's

After scores are totalled and marked, Summarize on Appendix 1.

- File with Appendix on top
 - Dad's two questionnaires next
 - Child's questionnaire next
 - Mother's questionnaire last.
- Note: If single-parent family - file Parent Questionnaires and then Child's.
- File in evaluation section of child's file.

Six month Followup Questionnaires - same procedure as above. However, a Client Satisfaction form will also be received. These should be scored for those on the Deviation From Scores only - (Positive Scores)

NOTE: Re Questionnaire # 2 and 3 - As above, except that scores are at different category numbers.

KEY TO SCORINGPROBLEMATIC - NON-PROBLEMATICQuestionnaire #1:

In the major Category Statement - If 4 or 5 are circled - it is automatic Problematic
 If 3 is circled - check to see if 50% or more of the specific category statements are responded to as problematic then this is a problematic response, if less than 50% 3 is not a problem.

In the Specific Category Statement - if 1, 2, or 3 are circled, it is problematic.

QUESTIONNAIRE #2:

Items responded to as follows are scored problematic:

- (1) 1,2,3 = problematic
- (2) 4,5 = problematic
- (3) 1,2,3 = problematic
- (4) 1,2,3 = problematic
- (5) 4,5 = problematic
- (6) 1,2,3 = problematic
- (7) 4,5 = problematic
- (8) 1,2,3 = problematic
- (9) 4,5 = problematic
- (10) 1,2,3 = problematic
- (11) 1,2,3 = problematic
- (12) 1,2,3 = problematic
- (13) 1,2,3 = problematic
- (14) 1,2,3 = problematic
- (15) 1,2,3 = problematic
- (16) 4,5 = problematic
- (17) 1,2,3 = problematic
- (18) 1,2,3 = problematic
- (19) 1,2,3 = problematic
- (20) 1,2,3 = problematic
- (21) 4,5 = problematic
- (22) 4,5 = problematic
- (23) 4,5 = problematic
- (24) 1,2,3 = problematic

KEY TO SCORING (Continued)QUESTIONNAIRE #3:

Items responded to as follows are scored problematic:

- (1) 2 = problematic
- (2) 2 = problematic
- (3) 2 = problematic
- (4) 1 = problematic
- (5) 1 = problematic
- (6) 1 = problematic
- (7) 1 = problematic
- (8) 2 = problematic
- (9) 2 = problematic
- (10) 1 = problematic
- (11) 2 = problematic
- (12) 2 = problematic
- (13) 1 = problematic
- (14) 1 = problematic
- (15) 2 = problematic
- (16) 1 = problematic
- (17) 1 = problematic
- (18) 1 = problematic
- (19) 1 = problematic
- (20) 1 = problematic

COMPOSITE SCORES FOR QUESTIONNAIRESQUESTIONNAIRE I

1. Comply	7
2. Accept "No"	4
3. Interaction with Peers	16
4. Interaction with Siblings	16
5. Use of Property	8
6. Honesty	3
7. Thoughtfulness	5
8. Health and Hygiene	10
9. Meals	6
10. Punctuality - School	3
11. Homework - School	4
12. Routines	4
	<hr/>
	86

QUESTIONNAIRE II:

1. Problem Solving	1,9,12,14,16,22	6
2. Parenting	2,3,7,10,15,17,19,20,21,23	10
3. Children	4,5,6,8,11,13,18,24	8
		<hr/>
		24

QUESTIONNAIRE III:

1. School	1,6,11,16	4
2. Happiness	2,7,12,17	4
3. Family	3,8,13,18	4
4. Popularity	4,9,14,19	4
5. Competence	5,10,15,20	4
		<hr/>
		20

APPENDIX 7

INSTRUCTIONS TO INTERVIEWERS:

You have been entrusted with the important task of interviewing some of our clients. To prepare yourself adequately for this responsibility, it is essential that you study in advance the following instructions:

PREPARING FOR THE INTERVIEW:

You will be notified when an interview is needed. At this time you will be given the client's name, address, phone number and questionnaires. (You'll need to drop into the office to pick these up)... Do not try to seek further information about the case. If there is anything about the client or the case that you should know, you will be informed. In general, it is hoped that you will know only the basic identifying information on the case in order that you may approach the interview with no preconceptions.

Some general preparation for interviewing will be needed. For example, you will need to familiarize yourself with the overall nature and purpose of the questionnaires you will be administering and be able to respond to certain typical questions. These include:

- Who are you?
- What is your relationship with the agency?
- What will be done with the information?

Many of these questions will be dealt with in the initial interview by the Research Associate. However, they will still have to be answered should they arise again. Review any questions you may have about the evaluation with the Research Associate.

REVIEW THE QUESTIONNAIRES:

You will also need to familiarize yourself with the questionnaires so that you can go through them smoothly and skillfully with the client.

ARRANGING THE INTERVIEW:

Just prior to you being notified that an interview is needed, the client will be notified that a volunteer from the evaluation program will be contacting them. You will arrange a mutually agreed on appointment time with the client. In all cases, you should attempt to contact the client as soon as possible, preferably within the week upon notification.

In the event that a client does not have a telephone number, you may either write the client a note suggesting a specific appointment and asking that the client notify you if the suggested time is inconvenient; or you could make a visit to the client's home, and hope to find them in.

When you make contact with a client, either in person or on the phone, an introduction, something like the following could be used:

"Hello, my name is _____. I'm contacting you on behalf of the Children's Foundation. You remember that every three months you would be asked to fill out some questionnaires. These questionnaires help to let the agency know how well its programs are benefiting you and your family. I will have 2 questionnaires for you (and spouse when applicable), to fill out separately, and one for (child's name) to fill out."

You can then make the necessary arrangements for the interview that would be most convenient.

CONDUCTING THE INTERVIEW:

The parent or parents and the child should be involved in the interview.

Begin with Questionnaire 3. This is for the child to fill out. Let the parents review what the items are. Provide any assistance that the child may require, i.e., understand the statements; read statements if child can't. Remember to emphasize that the responses must be the child's should mom or dad provide prompting or if the child asks how a statement should be answered. When the child has completed their questionnaire thank him/her. The child may leave the interview at this point.

With the parents, begin with Questionnaire 1 (Their Perception of their Child's Behaviour). Each parent is to fill out their own questionnaire. On completion of Questionnaire 1, each parent can then fill out Questionnaire 2.

In conducting the interview it is crucial that you provide an accepting atmosphere so that the parents and child will feel comfortable in filling out the questionnaire. It is also essential that you remain neutral and avoid "leading" or prompting the client to give any particular response. Don't try to anticipate how the parents and child will respond to statements on the questionnaire.

If any items are omitted, mark N/A beside the item. This usually occurs in four places: Questionnaire 1, items 10 and 11. These items deal with school and would not be applicable for a child attending the residential class. Item 10, part "e", Questionnaire 1, would not be applicable for boys should Hygiene be a problem. Item 4, Questionnaire 1, would be inappropriate if the child had no brothers or sisters.

At the end of the interview, be sure to thank the parents for their co-operation.

COMPLETING THE REPORT:

In order to complete the report, sign your name, the date of the interview and the location of the interview. This information is important as it is easy to mix up cases if the identifying information is not recorded promptly at the end of the interview. Check the questionnaires over carefully for completeness and turn them in without delay to The Research Associate.

IMPORTANCE OF YOUR ROLE:

Above all, remember that the reports you turn in provides important feedback to the agency staff on the results of service provided. Their knowledge will be complete or incomplete, accurate or inaccurate according to how well you are able to relate to each family and how carefully you have them respond to the questionnaires.

DEVIATION OF SATISFACTION SCORE

In deriving a "Satisfaction" level for each family, responses to the following Questionnaire Items were assigned the numeric values indicated.

The Sum Total of "scores" across all items, constitute the family's "satisfaction" score. (Possible composite scores range from 0 - 18)

Q.5: Do you feel differently about these problems?	much better 2
	better..... 2
Q.6: Do you attribute this change or lack of change in feeling about the problems to the program provided by the Children's Foundation?	yes, mostly..... 2
	yes, partly..... 1
Q.8: Were there any services you felt you should have received and didn't?	no..... 2
Q.9: Is what you learned from the Children's Foundation	helpful in many situations..... 2
	helpful in a few situations..... 1
Q.10: Did your experience with the Children's Foundation increase your feelings of con- fidence in resolving difficulties with your child(ren)?	a great deal..... 2
	somewhat..... 1
Q.11: Would you say your feelings about yourself as a parent are different?	a great deal better..... 2
	somewhat better... 1
Q.12: Since your involvement with the Children's Foundation, how do you view your child's behaviour at home?	improved..... 2
	slightly improved..... 1

- Q.13: Since your involvement with the Children's Foundation, how do you view your child's behaviour at school?
- improved..... 2
slightly improved..... 1
- Q.14: How would you rate your overall satisfaction with the services provided by the Children's Foundation?
- 4 or 5
rating..... 2

APPENDIX 8

DATA RECORD SHEET

VARIABLE NUMBER	VARIABLE NAME	SCORE 1	RANK 1	SCORE 2	RANK 2	SCORE 3	RANK 3	SCORE 4	RANK 4
	<u>FATHER</u>								
V1	COMPLY								
V2	ACCEPTS								
V3	PLAY								
V4	GETS ALONG								
V5	RESPECT								
V6	TRUSTWORTHY								
V7	THOUGHTFUL								
V8	HYGIENE								
V9	EATING								
V10	RULES								
V11	WORK								
V12	ROUTINES								
	<u>MOTHER</u>								
V13	COMPLY								
V14	ACCEPTS								
V15	PLAY								
V16	GETS ALONG								
V17	RESPECT								
V18	TRUSTWORTHY								
V19	THOUGHTFUL								
V20	HYGIENE								
V21	EATING								
V22	RULES								
V23	WORK								
V24	ROUTINES								
	SUM OF RANKS:								

- 2 -

<u>VARIABLE NUMBER</u>	<u>VARIABLE NAME</u>	<u>SCORE 1</u>	<u>RANK 1</u>	<u>SCORE 2</u>	<u>RANK 2</u>	<u>SCORE 3</u>	<u>RANK 3</u>	<u>SCORE 4</u>	<u>RANK 4</u>
	<u>FATHER</u>								
V25	PROBLEM								
V26	FEELINGS								
V27	ATTITUDES								
	<u>MOTHER</u>								
V28	PROBLEM								
V29	FEELINGS								
V30	ATTITUDES								
	<u>CHILD</u>								
V31	SCHOOL								
V32	HAPPINESS								
V33	FAMILY								
V34	POPULARITY								
V35	COMPETENCE								
	SUM OF RANKS:								

SAMPLE CASE

VARIABLE NUMBER	VARIABLE NAME	SCORE 1	RANK 1	SCORE 2	RANK 2	SCORE 3	RANK 3	SCORE 4	RANK 4
<u>FATHER</u>									
V1	COMPLY	3 20 171	9	346 37	4	230 26			
V2	ACCEPTS	3 21 18	4	326 22	4	224 20			
V3	PLAY	18 108 30	9	173 64	10	224 64			
V4	GETS ALONG	18 108 30	14	284 71	6	166 60			
V5	RESPECT	10 60 50	8	251 43	8	150 42			
V6	TRUSTWORTHY	2 19 17	2	189 17	3	322 19			
V7	THOUGHTFUL	3 21 19	4	227 23	5	333 28			
V8	HYGIENE	10 54 44	9	255 46	12	367 55			
V9	EATING	7 42 35	7	240 33	5	135 30			
V10	RULES	3 19 16	5	230 25	5	280 25			
V11	WORK	6 33 127	5	330 28	6	34 28			
V12	ROUTINES	3 21 19	3	1522 19	4	327 23			
<u>MOTHER</u>									
V13	COMPLY	6 336 30	6	232 26	8	31 28			
V14	ACCEPTS	4 22 18	2	120 18	3	323 20			
V15	PLAY	13 373 60	6	160 54	9	270 61			
V16	GETS ALONG	10 64 54	18	291 73	17	392 75			
V17	RESPECT	9 46 37	6	145 39	8	350 42			
V18	TRUSTWORTHY	3 530 25	2	119 17	3	221 18			
V19	THOUGHTFUL	3 36 29	3	126 23	6	234 28			
V20	HYGIENE	1 19 51 42	7	1551 49	9	362 53			
V21	EATING	15 28 23	3	229 26	8	340 32			
V22	RULES	5 230 25	5	230 25	5	129 24			
V23	WORK	6 286 30	6	286 30	6	32 26			
V24	ROUTINES	3 18 15	2	220 18	3	325 22			

VARIABLE NUMBER	VARIABLE NAME	SCORE 1	RANK 1	SCORE 2	RANK 2	SCORE 3	RANK 3	SCORE 4	RANK 4
	<u>FATHER</u>								
V25	PROBLEM	4	3	52	25	20	31	21	18
V26	FEELINGS	6	39	33	31	29	26	42	31
V27	ATTITUDES	2	18	16	4	31	32	7	24
	<u>MOTHER</u>								
V28	PROBLEM	4	24	20	2	118	16	42	23
V29	FEELINGS	3	29	26	5	336	31	4	231
V30	ATTITUDES	5	33	28	1	122	21	4	229
	<u>CHILD</u>								
V31	SCHOOL	3	10	7	13	10	7	4	312
V32	HAPPINESS	2	8	6	4	512	8	2	45
V33	FAMILY	3	10	275	2	18	6	32	510
V34	POPULARITY	3	10	7	2	1	8	6	4312
V35	COMPETENCE	2	8	6	4	312	8	2	18
	SUM OF RANKS	85	90	72.5					

+5.67 \bar{x} \cdot 0.10 P
 $\bar{x}^2 = 4.667 @ .19$

+0.67 \bar{x} \cdot 1

+10.90 \bar{x} \cdot 1

APPENDIX 9

A REVIEW OF DATA CODING PROBLEMS

Initially the analysis of the data collected by Children's Foundation appeared to be a straight forward proposition. The Foundation staff had conscientiously transferred the data from each questionnaire or probe onto a data sheet. Consequently, it appeared that coding would be a simple matter of totalling the scores for the data collected for each questionnaire. This procedure, however, quickly became complicated as this researcher had to deal with not only reverse scoring but with the identification of behaviours that the Foundation viewed as being problematic.

The easiest method of addressing the data recording and scoring process is to approach it questionnaire by questionnaire. Since each questionnaire is scored differently and measures different dynamics in the family, this researcher feels that this approach is the most logical way of describing the coding process. In addition, since each questionnaire measures different dynamics the definition of problematic and non-problematic behaviour varies.

The first questionnaire consists of twelve questions designed to obtain a statement from parents about their child's behaviour. Parents are presented with a series of twelve questions and asked to score them on a

scale from "all the time" through to "never". Each question has a major category statement which is worded in a positive manner. Following this major category statement are a number of specific category statements which parents may complete or leave blank, depending on their response to the major category statement. The specific category statements tend to be more negatively worded by identifying specific problematic behaviours that the child uses to disobey or ignore parents' requests for certain behaviours. Consequently, the construction of these questionnaires presents a problem for coding.

For the purposes of coding, this researcher opted to work on a basis of a positive response or positive behaviour obtaining a higher score. The rationale behind this decision is that the specific category statements which are worded more negatively tend to be coded so that a high score indicates a positive behaviour. In other words, in a situation where a child does not argue with his parents, the parent has a selection of scores between one, representing all the time, and five, representing never. For the child who never argues, as a result, the score on this questionnaire indicating positive behaviour would be a five. For the child who always argues with his parents the score would be one or a low score. Consequently, all the specific category statements are coded so that a high score represents a positive behaviour, since the child "never" behaves in any of the negative fashions if his behaviour is good.

Consequently, the major category statement must be reverse coded. For example, the major category statement "the child does what he is told"

is scored on the same scale as the specific category statements. Thus, when a parent indicates a score of one or that the child does what he is told all the time, the parent is indicating a positive behaviour. However, when the score from the major category statement is compared to the score from the specific category statements it is possible to see that the scores are reversed. In other words, when the child does as he is told all the time he is demonstrating a positive behaviour and the score is one. However, for the specific category statements a score of one indicates the child disobeys all the time by arguing, for example. Consequently, for coding purposes, it is necessary to convert or reverse score the major category statements so that a score of five represents a positive behaviour while a score of one represents a negative behaviour.

A second problem arises for coding when a parent completes the major category statement and leaves the balance of the specific category statements blank. This creates a problem for the consistent scoring of this questionnaire since it is possible for the parent to change his or her mind on the second or third probe and respond to the specific category statements as well as the major category statement. As a result this would apparently reflect an improvement in the child's behaviour over time simply because the scores on the first probe and the second or third probes differ. However, this could in fact reflect a deterioration in the child's behaviour. For example, a parent might indicate that a child always does as he is told and obtain initially a score of five when it is reverse coded. However, over time the child's behaviour might deteriorate so that instead of doing as he is told all the time he begins to argue or complain or whine. As a result, the parents may score each of these three

categories as two's or three's in the second or third probe. This would result in a score that apparently is higher than the initial probe but that in fact reflects worsening behaviour. As a result, for the purpose of coding, this researcher decided to take the score from the major category statement and multiply it times the number of specific category statements in each question for this type of situation. This gives a compound positive score covering all the specific category statements in the questionnaire. Thus, for example, if a child does as he is told all the time and is assigned a score of one by the parent, this researcher assigns it a score of five and multiplies five times the number of specific category statements in the questionnaire to obtain the compound score. This should reflect a truer picture of the parent's intention or description of the child's behaviour at the time that he completed the probe.

Each question in questionnaire one also contains a final statement or behaviour category called "other", in which the parent is able to indicate any problematic behaviour not covered in the specific statements. This specific category statement is often left blank. For coding purposes, this researcher decided to assign it a routine score of five, assuming that the failure of the parent to specify any further problematic behaviours represents a positive score for the child. Since the behaviour cannot be determined to be either problematic or non-problematic, parents are given the benefit of the doubt in that if they did not specify another problematic behaviour under the "other" blanks, then it is assumed that the response to this question must be positive.

This researcher also adopted the same policy of providing scores of five or positive scores for all situations where categories are left blank. When a parent fails to respond to any of the specific category statements, this researcher assumed that the behaviour was non-problematic. As a result this researcher decided to assign the blanks or missing data a score of five on the assumption that the behaviour must be non-problematic and therefore deserved a high score.

The Children's Foundation adopted an additional scoring method for identifying problematic and non-problematic behaviours. In situations where the major category statement has a score of four or five, the agency assumed that this indicates problematic behaviour. In other words, if "the child does as he is told", is responded to by a four from the parents, i.e., hardly ever, then the behaviour is felt to be problematic. In this situation this researcher would assign the score of four or five a score of one or two (reverse coded) and assume that this represents problematic behaviour for the parents.

In scoring the questionnaires, the agency had to determine how to score a three on each of the questions in the questionnaires. The problem is that a three can frequently be used or viewed as a positive behaviour since the child often does as he is told or as a negative behaviour since the child often does not do as he is told. Consequently the agency was forced to develop some method of scoring or recognizing three's as either problematic or non-problematic behaviour. For the major category statement the agency adopted a policy of recognizing a three as problematic where the parents indicated that fifty per cent of the other behaviours in the specific category statements are problematic. Thus, if a particular

question has ten items in it, and five specific category statements are circled as problematic, then the major category statement will be considered problematic if the parent has in addition circled a three. The agency also assumed that a score of one, two or three on the specific category statements in questionnaire one indicate problematic behaviours.

In the coding of the Children's Foundation data, this researcher also encountered difficulties in developing a means of reflecting improvement in a child's behaviour. Somehow this researcher had to provide some recognition for improvement in a child's behaviour. This researcher felt that a total score or totalling the scores on any question will not reflect improvement in the child. For example, the child may obtain a smaller score for the questionnaire but may be reflecting fewer problematic behaviours over the questionnaire as a whole. In other words, in adopting the Children's Foundation scoring techniques, it is possible for a child's behaviour to improve and yet the score for the questionnaires to remain approximately the same. As a result, this researcher opted for a system of assigning one additional point for each non-problematic or positive behaviour reflected in each category statement. This additional point provides some recognition for the child whose behaviour is improving in the parent's eye and who is being less problematic. It also adjusts for the child who obtains a low score on the total questionnaire, but who is demonstrating improved behaviour. The bonus points compensate for the low score by indicating that the child is making some progress in his behaviour change.

The coded score or results for each questionnaire, thus, are represented by the total of the scores for the parents on each of the major and specific

category statements, plus a point per positive behaviour through each question. In the case of missing information, or for the final specific category statement which allows parents to specify other problematic behaviours, one additional point is assigned. Thus, in the situation where there are ten items including both the major and specific category statements, there is a potential for ten additional points for demonstrating positive behaviour. The scores for each individual question on the first questionnaire are totalled, combining positive scores for nonproblematic behaviour with the parents' actual responses and transferred to the Data Record Sheet for ranking and analysis.

Questionnaire one measures twelve specific behaviours of the child in the home. Each question in the questionnaire provides a score for each of the twelve behaviours. On the Data Record Sheet these twelve behaviours are specified and scores for each are indicated and used for ranking and analysis.

Questionnaire two consists of twenty-four items designed to measure parents' feelings about parenting. The twenty-four items are compressed into three specific areas of parenting responsibility. Problem solving, parenting or attitudes to parenting, and attitudes to children are the three specific areas that questionnaire two attempts to measure. Parents are asked to rate their feelings about a number of statements on a scale varying from completely true to never true.

For the purposes of coding, this researcher recognized that a number of the questions are again reverse coded, and have to be scored in reverse order

to obtain a proper tally for parental behaviours. Once again, a positive response is given a score of five whereas a negative response is given a lower score. In addition, this researcher decided to continue to provide a bonus point for each non-problematic behaviour. This process again provides recognition for improvement in the parents' attitudes about parenting. The scores are added and recorded on the Data Record Sheets for ranking.

The final questionnaire, questionnaire three, involves the child responding to a questionnaire on a basic yes/no response scale. The twenty items of this scale are designed to measure the child's feelings about five specific areas in his life. The items are compressed into measuring the child's feelings about school, his feelings of happiness, his feelings about his family, his popularity and his feelings about his own competence. Once again, a number of these items are reverse scored. This researcher opted for a score of two to represent a positive behaviour. To be consistent with the previous method of adding additional points for positive behaviour, this researcher added one additional point for each positive behaviour. In this particular scale, however, since it is only a two-point scale and there is no possibility of behaviour changing without it moving from either a positive to a negative or a negative to a positive, the addition of one point per positive behaviour does little other than to increase the differences between scores. The original purpose of adding an additional point per positive behaviour is to give recognition where behaviour changes. On this particular scale the change in behaviour cannot be made without it moving either into the positive or into the negative. In other words, there is no mid point for the child where behaviour may improve and yet still be questionable or problematic. These scores are again recorded on

the Data Record Sheets for analysis.

In addition to this rather complex coding system, this researcher also encountered difficulty in locating the data in the Children's Foundation Data Record Sheets. As indicated, the Children's Foundation staff has meticulously transferred the scores for each questionnaire onto graph paper. In addition the staff have circled the problematic behaviours as identified by the Children's Foundation coding procedures. As a result it was easy to identify the problematic and non-problematic behaviours and to obtain the scores for each questionnaire. However, the difficulty arose for this researcher in that the data is sorted by probe rather than by family unit. As a result, to obtain the score for one individual family it is necessary to refer to four separate series of data sheets, one for each probe. This represented considerable effort for this researcher, in that for each probe this researcher had to look at a different series of data information sheets from the Children's Foundation. In addition, the Children's Foundation data tended to be recorded in order of return to the Foundation rather than in order of case number. Consequently it is possible that case nineteen data might have been returned before case ten data, and appeared earlier on the Data Record Sheets. This meant that this researcher had to do some searching for cases in order to locate them in the Children's Foundation data records. As a result, the coding of this data was made ever more difficult simply by the problematic recording of the data. As a result of the frustrations of dealing with this data, this researcher is making some recommendations towards the standardization of the data recording system at Children's Foundation. Such a standardization will hopefully also make it easier for Children's Foundation staff to record and maintain

data records on each of their clients. These recommendations are located in the conclusions to Chapter IV.

APPENDIX 10

PROGRAM ANALYSIS FOR STAFF SURVEY DATA

UNIVARIATE DATA

2 CARDS FILE=MIKE
ZEROS 1-108='E'
VECT V1=5-80, 105-107
TABLES V1
END

TIME FOR CONTROL CARD PROCESSING:
0.041 CPU sec.
2 PAGES FOR GENERATED CODE
5 PAGES FOR TABLES

TIME FOR READING DATA AND TABLE GENERATION:
0.010 CPU sec.

NUMBER OF RECORDS READ:
28

UNIVARIATE TABLE of COLUMN 5

FREQUENCY TABLE					
ZERO	E	1	2	3	
		7	5	2	14

TOTAL PERCENTAGE					
ZERO	E	1	2	3	
		50.00	35.71	14.29	14

UNIVARIATE TABLE of COLUMN 6

FREQUENCY TABLE					
ZERO	E	1	2	3	4
		2	6	4	2
					14

TOTAL PERCENTAGE					
ZERO	E	1	2	3	4
		14.29	42.86	28.57	14.29
					14

UNIVARIATE TABLE of COLUMN 7

FREQUENCY TABLE					
ZERO	E	3	4	5	
		2	10	2	14

TOTAL PERCENTAGE					
ZERO	E	3	4	5	
		14.29	71.43	14.29	14

UNIVARIATE TABLE of COLUMN 8

FREQUENCY TABLE					
ZERO	E	1	2	3	4
		2	5	3	4
					14

TOTAL PERCENTAGE					
ZERO	E	1	2	3	4
		14.29	35.71	21.43	28.57
					14

UNIVARIATE TABLE of COLUMN 9

FREQUENCY TABLE				
ZERO	E	1	2	
		1	13	14

TOTAL PERCENTAGE				
ZERO	E	1	2	
		7.14	92.86	14

UNIVARIATE TABLE of COLUMN 10

FREQUENCY TABLE				
ZERO	E	3	4	5
		2	9	3
				14

TOTAL PERCENTAGE				
ZERO	E	3	4	5
		14.29	64.29	21.43
				14

UNIVARIATE TABLE of COLUMN 11

FREQUENCY TABLE				
ZERO	E	1	2	
		5	9	14

TOTAL PERCENTAGE				
ZERO	E	1	2	
		35.71	64.29	14

UNIVARIATE TABLE of COLUMN 12

FREQUENCY TABLE				
ZERO	E	1	2	
		7	6	13

TOTAL PERCENTAGE				
ZERO	E	1	2	
		53.85	46.15	13

UNIVARIATE TABLE of COLUMN 13

FREQUENCY TABLE				
ZERO	E	1	2	
		7	5	12

TOTAL PERCENTAGE				
ZERO	E	1	2	
		58.33	41.67	12

UNIVARIATE TABLE of COLUMN 14

FREQUENCY TABLE					
ZERO	E	1	2	3	4
		4	4	2	3
					13

TOTAL PERCENTAGE					
ZERO	E	1	2	3	4
		30.77	30.77	15.38	23.08
					13

UNIVARIATE TABLE of COLUMN 15

FREQUENCY TABLE			
ZERO	E	1	2
		2	10
			12

TOTAL PERCENTAGE			
ZERO	E	1	2
		16.67	83.33
			12

UNIVARIATE TABLE of COLUMN 16

FREQUENCY TABLE				
ZERO	E	2	3	4
		5	4	3
				12

TOTAL PERCENTAGE				
ZERO	E	2	3	4
		41.67	33.33	25.00
				12

UNIVARIATE TABLE of COLUMN 17

FREQUENCY TABLE					
ZERO	E	2	3	4	
		1	3	8	12
TOTAL PERCENTAGE					
ZERO	E	2	3	4	
		8.33	25.00	66.67	12

UNIVARIATE TABLE of COLUMN 18

FREQUENCY TABLE					
ZERO	E	1	2	3	
		3	9	1	13
TOTAL PERCENTAGE					
ZERO	E	1	2	3	
		23.08	69.23	7.69	13

UNIVARIATE TABLE of COLUMN 19

FREQUENCY TABLE						
ZERO	E	2	3	4	5	
		2	3	6	3	14
TOTAL PERCENTAGE						
ZERO	E	2	3	4	5	
		14.29	21.43	42.86	21.43	14

UNIVARIATE TABLE of COLUMN 20

FREQUENCY TABLE							
ZERO	E	1	2	3	4	5	
		1	8	2	2	1	14
TOTAL PERCENTAGE							
ZERO	E	1	2	3	4	5	
		7.14	57.14	14.29	14.29	7.14	14

UNIVARIATE TABLE of COLUMN 21

FREQUENCY TABLE					
ZERO	E	3	4	5	
		4	9	1	14
TOTAL PERCENTAGE					
ZERO	E	3	4	5	
		28.57	64.29	7.14	14

UNIVARIATE TABLE of COLUMN 22

FREQUENCY TABLE					
ZERO	E	2	3	4	5
		3	1	8	2
					14
TOTAL PERCENTAGE					
ZERO	E	2	3	4	5
		21.43	7.14	57.14	14.29
					14

UNIVARIATE TABLE of COLUMN 23

FREQUENCY TABLE					
ZERO	E	1	2	3	
		3	10	1	14
TOTAL PERCENTAGE					
ZERO	E	1	2	3	
		21.43	71.43	7.14	14

UNIVARIATE TABLE of COLUMN 24

FREQUENCY TABLE					
ZERO	E	1	2		
		3	11		14
TOTAL PERCENTAGE					
ZERO	E	1	2		
		21.43	78.57		14

UNIVARIATE TABLE of COLUMN 25

FREQUENCY TABLE					
ZERO	E	1	2	3	
		2	11	1	14
TOTAL PERCENTAGE					
ZERO	E	1	2	3	
		14.29	78.57	7.14	14

UNIVARIATE TABLE of COLUMN 26

FREQUENCY TABLE					
ZERO	E	1	2	3	4
		1	5	3	3
					12
TOTAL PERCENTAGE					
ZERO	E	1	2	3	4
		8.33	41.67	25.00	25.00
					12

UNIVARIATE TABLE of COLUMN 27

FREQUENCY TABLE					
ZERO	E	1	2	3	4
		2	8	2	2
					14
TOTAL PERCENTAGE					
ZERO	E	1	2	3	4
		14.29	57.14	14.29	14.29
					14

UNIVARIATE TABLE of COLUMN 28

FREQUENCY TABLE					
ZERO	E	1	2	3	4
		1	9	1	3
					14
TOTAL PERCENTAGE					
ZERO	E	1	2	3	4
		7.14	64.29	7.14	21.43
					14

UNIVARIATE TABLE of COLUMN 29

FREQUENCY TABLE				
ZERO	E	2	3	4
		8	2	4
				14

TOTAL PERCENTAGE				
ZERO	E	2	3	4
		57.14	14.29	28.57
				14

UNIVARIATE TABLE of COLUMN 30

FREQUENCY TABLE				
ZERO	E	2	3	4
		7	1	5
				13

TOTAL PERCENTAGE				
ZERO	E	2	3	4
		53.85	7.69	38.46
				13

UNIVARIATE TABLE of COLUMN 31

FREQUENCY TABLE						
ZERO	E	1	2	3	4	5
		3	7	2	1	1
						14

TOTAL PERCENTAGE						
ZERO	E	1	2	3	4	5
<hr/>						
		21.43	50.00	14.29	7.14	7.14
						14

UNIVARIATE TABLE of COLUMN 32

FREQUENCY TABLE					
ZERO	E	1	2	3	4
		2	9	1	2
					14

TOTAL PERCENTAGE					
ZERO	E	1	2	3	4
		14.29	64.29	7.14	14.29
					14

UNIVARIATE TABLE of COLUMN 33

FREQUENCY TABLE						
ZERO	E	1	2	3	4	
		2	7	3	2	14
TOTAL PERCENTAGE						
ZERO	E	1	2	3	4	
		14.29	50.00	21.43	14.29	14

UNIVARIATE TABLE of COLUMN 34

FREQUENCY TABLE						
ZERO	E	1	2	3	4	
		2	9	2	1	14
TOTAL PERCENTAGE						
ZERO	E	1	2	3	4	
		14.29	64.29	14.29	7.14	14

UNIVARIATE TABLE of COLUMN 35

FREQUENCY TABLE						
ZERO	E	2	3	4		
		1	4	9		14
TOTAL PERCENTAGE						
ZERO	E	2	3	4		
		7.14	28.57	64.29		14

UNIVARIATE TABLE of COLUMN 36

FREQUENCY TABLE							
ZERO	E	1	2	3	4	5	
		1	5	2	5	1	14
TOTAL PERCENTAGE							
ZERO	E	1	2	3	4	5	
		7.14	35.71	14.29	35.71	7.14	14

UNIVARIATE TABLE of COLUMN 37

FREQUENCY TABLE					
ZERO	E	2	3	4	
		1	5	8	14

TOTAL PERCENTAGE					
ZERO	E	2	3	4	
		7.14	35.71	57.14	14

UNIVARIATE TABLE of COLUMN 38

FREQUENCY TABLE					
ZERO	E	2	3	4	5
		1	3	9	1
					14

TOTAL PERCENTAGE					
ZERO	E	2	3	4	5
		7.14	21.43	64.29	7.14
					14

UNIVARIATE TABLE of COLUMN 39

FREQUENCY TABLE				
ZERO	E	1	2	3
		1	12	1
				14

TOTAL PERCENTAGE				
ZERO	E	1	2	3
		7.14	85.71	7.14
				14

UNIVARIATE TABLE of COLUMN 40

FREQUENCY TABLE					
ZERO	E	2	3	4	5
		5	2	6	1
					14

TOTAL PERCENTAGE					
ZERO	E	2	3	4	5
		35.71	14.29	42.86	7.14
					14

UNIVARIATE TABLE of COLUMN 41

FREQUENCY TABLE						
ZERO	E	2	3	4	5	
		3	3	4	1	11
TOTAL PERCENTAGE						
ZERO	E	2	3	4	5	
		27.27	27.27	36.36	9.09	11

UNIVARIATE TABLE of COLUMN 42

FREQUENCY TABLE						
ZERO	E	2	3	4	5	
		3	3	6	1	13
TOTAL PERCENTAGE						
ZERO	E	2	3	4	5	
		23.08	23.08	46.15	7.69	13

UNIVARIATE TABLE of COLUMN 43

FREQUENCY TABLE						
ZERO	E	1	2	3	5	
		6	4	2	1	13
TOTAL PERCENTAGE						
ZERO	E	1	2	3	5	
		46.15	30.77	15.38	7.69	13

UNIVARIATE TABLE of COLUMN 44

FREQUENCY TABLE						
ZERO	E	1	2	3	4	5
		1	4	3	4	1
TOTAL PERCENTAGE						
ZERO	E	1	2	3	4	5
		7.69	30.77	23.08	30.77	7.69

UNIVARIATE TABLE of COLUMN 45

FREQUENCY TABLE					
ZERO	E	2	3	4	
		7	3	2	12
TOTAL PERCENTAGE					
ZERO	E	2	3	4	
		58.33	25.00	16.67	12

UNIVARIATE TABLE of COLUMN 46

FREQUENCY TABLE					
ZERO	E	1	2	3	4
		2	7	4	1
TOTAL PERCENTAGE					
ZERO	E	1	2	3	4
		14.29	50.00	28.57	7.14

UNIVARIATE TABLE of COLUMN 47

FREQUENCY TABLE					
ZERO	E	2	3	4	
		8	3	3	14
TOTAL PERCENTAGE					
ZERO	E	2	3	4	
		57.14	21.43	21.43	14

UNIVARIATE TABLE of COLUMN 48

FREQUENCY TABLE					
ZERO	E	2	4	5	
		2	10	2	14
TOTAL PERCENTAGE					
ZERO	E	2	4	5	
		14.29	71.43	14.29	14

UNIVARIATE TABLE of COLUMN 49

FREQUENCY TABLE				
ZERO	E	1	2	
		5	9	14
TOTAL PERCENTAGE				
ZERO	E	1	2	
		35.71	64.29	14

UNIVARIATE TABLE of COLUMN 50

FREQUENCY TABLE				
ZERO	E	3	4	5
		1	11	2 14
TOTAL PERCENTAGE				
ZERO	E	3	4	5
		7.14	78.57	14.29 14

UNIVARIATE TABLE of COLUMN 51

FREQUENCY TABLE					
ZERO	E	2	3	4	5
		1	2	9	2 14
TOTAL PERCENTAGE					
ZERO	E	2	3	4	5
		7.14	14.29	64.29	14.29 14

UNIVARIATE TABLE of COLUMN 52

FREQUENCY TABLE						
ZERO	E	1	2	3	4	5
		3	7	1	2	1 14
TOTAL PERCENTAGE						
ZERO	E	1	2	3	4	5
		21.43	50.00	7.14	14.29	7.14 14

UNIVARIATE TABLE of COLUMN 53

FREQUENCY TABLE						
ZERO	E	2	3	4	5	
		4	3	6	1	14
TOTAL PERCENTAGE						
ZERO	E	2	3	4	5	
		28.57	21.43	42.86	7.14	14

UNIVARIATE TABLE of COLUMN 54

FREQUENCY TABLE						
ZERO	E	2	3	4	5	
		3	1	9	1	14
TOTAL PERCENTAGE						
ZERO	E	2	3	4	5	
		21.43	7.14	64.29	7.14	14

UNIVARIATE TABLE of COLUMN 55

FREQUENCY TABLE						
ZERO	E	1	2			
		6	8			14
TOTAL PERCENTAGE						
ZERO	E	1	2			
		42.86	57.14			14

UNIVARIATE TABLE of COLUMN 56

FREQUENCY TABLE						
ZERO	E	2	3	4	5	
		1	2	8	2	13
TOTAL PERCENTAGE						
ZERO	E	2	3	4	5	
		7.69	15.38	61.54	15.38	13

UNIVARIATE TABLE of COLUMN 57

FREQUENCY TABLE						
ZERO	E	2	3	4	5	
		1	2	8	1	12
TOTAL PERCENTAGE						
ZERO	E	2	3	4	5	
		8.33	16.67	66.67	8.33	12

UNIVARIATE TABLE of COLUMN 58

FREQUENCY TABLE						
ZERO	E	2	4	5		
		7	5	2		14
TOTAL PERCENTAGE						
ZERO	E	2	4	5		
		50.00	35.71	14.29		14

UNIVARIATE TABLE of COLUMN 59

FREQUENCY TABLE						
ZERO	E	2	3	4	5	
		4	1	7	1	13
TOTAL PERCENTAGE						
ZERO	E	2	3	4	5	
		30.77	7.69	53.85	7.69	13

UNIVARIATE TABLE of COLUMN 60

FREQUENCY TABLE						
ZERO	E	1	2	3		
		2	8	3		13
TOTAL PERCENTAGE						
ZERO	E	1	2	3		
		15.38	61.54	23.08		13

UNIVARIATE TABLE of COLUMN 61

FREQUENCY TABLE					
ZERO	E	2	3	4	5
		1	1	11	1
					14

TOTAL PERCENTAGE					
ZERO	E	2	3	4	5
		7.14	7.14	78.57	7.14
					14

UNIVARIATE TABLE of COLUMN 62

FREQUENCY TABLE				
ZERO	E	1	2	4
		1	9	3
				13

TOTAL PERCENTAGE				
ZERO	E	1	2	4
		7.69	69.23	23.08
				13

UNIVARIATE TABLE of COLUMN 63

FREQUENCY TABLE				
ZERO	E	1	2	3
		2	10	1
				13

TOTAL PERCENTAGE				
ZERO	E	1	2	3
		15.38	76.92	7.69
				13

UNIVARIATE TABLE of COLUMN 64

FREQUENCY TABLE				
ZERO	E	1	2	3
		3	9	1
				13

TOTAL PERCENTAGE				
ZERO	E	1	2	3
		23.08	69.23	7.69
				13

UNIVARIATE TABLE of COLUMN 65

FREQUENCY TABLE					
ZERO	E	1	2	3	4
		2	9	2	1
		14.29	64.29	14.29	7.14
					14

UNIVARIATE TABLE of COLUMN 66

FREQUENCY TABLE					
ZERO	E	1	2	3	4
		3	8	2	1
		21.43	57.14	14.29	7.14
					14

UNIVARIATE TABLE of COLUMN 67

FREQUENCY TABLE					
ZERO	E	1	2	3	
		1	11	1	13
		7.69	84.62	7.69	
					13

UNIVARIATE TABLE of COLUMN 68

FREQUENCY TABLE					
ZERO	E	1	2	3	4
		1	7	5	1
		7.14	50.00	35.71	7.14
					14

UNIVARIATE TABLE of COLUMN 69

FREQUENCY TABLE				
ZERO	E	1	2	3
		2	11	1
				14

TOTAL PERCENTAGE				
ZERO	E	1	2	3
		14.29	78.57	7.14
				14

UNIVARIATE TABLE of COLUMN 70

FREQUENCY TABLE						
ZERO	E	1	2	3	4	5
		1	5	6	1	1
						14

TOTAL PERCENTAGE						
ZERO	E	1	2	3	4	5
		7.14	35.71	42.86	7.14	7.14
						14

UNIVARIATE TABLE of COLUMN 71

FREQUENCY TABLE			
ZERO	E	3	4
		2	11
			13

TOTAL PERCENTAGE			
ZERO	E	3	4
		15.38	84.62
			13

UNIVARIATE TABLE of COLUMN 72

FREQUENCY TABLE				
ZERO	E	2	3	4
		1	2	9
				2
				14

TOTAL PERCENTAGE				
ZERO	E	2	3	4
		7.14	14.29	64.29
				14.29
				14

UNIVARIATE TABLE of COLUMN 73

FREQUENCY TABLE					
ZERO	E	2	3	4	
		3	1	9	13

TOTAL PERCENTAGE					
ZERO	E	2	3	4	
		23.08	7.69	69.23	13

UNIVARIATE TABLE of COLUMN 74

FREQUENCY TABLE				
ZERO	E	1	2	
		5	9	14

TOTAL PERCENTAGE				
ZERO	E	1	2	
		35.71	64.29	14

UNIVARIATE TABLE of COLUMN 75

FREQUENCY TABLE					
ZERO	E	1	3	4	5
		1	1	7	3
					12

TOTAL PERCENTAGE					
ZERO	E	1	3	4	5
		8.33	8.33	58.33	25.00
					12

UNIVARIATE TABLE of COLUMN 76

FREQUENCY TABLE				
ZERO	E	1	2	3
		2	9	3
				14

TOTAL PERCENTAGE				
ZERO	E	1	2	3
		14.29	64.29	21.43
				14

UNIVARIATE TABLE of COLUMN 77

FREQUENCY TABLE					
ZERO	E	1	2	3	
		1	11	1	13

TOTAL PERCENTAGE					
ZERO	E	1	2	3	
		7.69	84.62	7.69	13

UNIVARIATE TABLE of COLUMN 78

FREQUENCY TABLE						
ZERO	E	1	2	3	4	5
		2	4	1	6	1
						14

TOTAL PERCENTAGE						
ZERO	E	1	2	3	4	5
		14.29	28.57	7.14	42.86	7.14
						14

UNIVARIATE TABLE of COLUMN 79

FREQUENCY TABLE				
ZERO	E	1	2	3
		6	7	1
				14

TOTAL PERCENTAGE				
ZERO	E	1	2	3
		42.86	50.00	7.14
				14

UNIVARIATE TABLE of COLUMN 80

FREQUENCY TABLE				
ZERO	E	1	3	5
		8	5	1
				14

TOTAL PERCENTAGE				
ZERO	E	1	3	5
		57.14	35.71	7.14
				14

UNIVARIATE TABLE of COLUMN 105

FREQUENCY TABLE				
ZERO	E	1	3	
		4	10	14

TOTAL PERCENTAGE				
ZERO	E	1	3	
		28.57	71.43	14

UNIVARIATE TABLE of COLUMN 106

FREQUENCY TABLE				
ZERO	E	1	2	
		3	11	14

TOTAL PERCENTAGE				
ZERO	E	1	2	
		21.43	78.57	14

UNIVARIATE TABLE of COLUMN 107

FREQUENCY TABLE				
ZERO	E	1	2	
		13	1	14

TOTAL PERCENTAGE				
ZERO	E	1	2	
		92.86	7.14	14

TIME FOR TABLE PRINTING:
0.372 CPU sec.

3 0201124325222423424234221422322222314422222223414512415444242212222230221412113
4 0202321
5 0301233323212222423232222222443443343222324222244222222232222223234422122123
6 0302321
7 04012344242222232424422222202232222323442322242442442442424422222234442422421
8 0402321
9 0501124224212122424244222322242222444424042423242444442402424422222323444242223
10 0502321
11 06012444242221124355442234444454324445225555224514455515454241231424254441522423
12 0602321
17 0901114114100000022142222042222222444413331323322443242434224222222123321022211
18 0902111
19 1001124424121324422434222234421222454424343421441422341444334232323244442422421
20 1002321
21 11011132242214244142451122132211114244244412322415524424424142112122114541511211
22 1102121
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End of file

DATA FILE MIKE

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 CALC 118=5+67+77+79
 CALC 119=15+45+63+67+77
 CALC 120=29+79
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 CALC 122=8+19+20+21+22+26+30+32+34+50+52+54+58
 CALC 123=64+68
 CALC 124=26+30+68
 CALC 125=18+32+34
 CALC 126=8+20
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 CALC 129=66+69+72+76
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TIME FOR CONTROL CARD PROCESSING:
 0.106 CPU sec.
 2 PAGES FOR GENERATED CODE
 113 PAGES FOR TABLES

TIME FOR READING DATA AND TABLE GENERATION:
 0.016 CPU sec.

NUMBER OF RECORDS READ:
 28

BIVARIATE DATA
 PROGRAM ANALYSIS FOR STAFF SURVEY DATA

BIVARIATE TABLE of COLUMN 105 vs COLUMN 109

FREQUENCY TABLE													
ZERO E-T	(21)L	(25)P	(26)Q	(27)R	(28)S	(31)V	(32)W	(34)Y	(35)Z	(36)_	(39).	(43)	
1	1	0	0	1	1	1	0	0	0	0	0	0	4
3	0	1	1	0	0	1	1	1	2	1	1	1	10
	1	1	1	1	1	2	1	1	2	1	1	1	14

BIVARIATE TABLE of COLUMN 105 vs COLUMN 110

FREQUENCY TABLE											
ZERO E-T	(16)G	(21)L	(24)D	(25)P	(26)Q	(28)S	(29)T	(30)U	(32)W	(37)	
1	1	0	1	0	1	1	0	0	0	0	4
3	0	2	0	1	0	1	2	2	1	1	10
	1	2	1	1	1	2	2	2	1	1	14

BIVARIATE TABLE of COLUMN 105 vs COLUMN 111

FREQUENCY TABLE							
ZERO E-T	2	3	4	5	6	7	
1	1	2	0	1	0	0	4
3	0	1	1	2	5	1	10
	1	3	1	3	5	1	14

BIVARIATE TABLE of COLUMN 105 vs COLUMN 112

FREQUENCY TABLE							
ZERO E-T	9	(10)A	(12)C	(13)D	(14)E	(15)F	
1	1	1	0	0	2	0	4
3	0	3	1	3	1	2	10
	1	4	1	3	3	2	14

BIVARIATE TABLE of COLUMN 105 vs COLUMN 113

FREQUENCY TABLE								
ZERO E-T	2	3	6	7	8	9	(10)A	
1	1	1	0	1	0	1	0	4
3	0	0	2	2	3	2	1	10
	1	1	2	3	3	3	1	14

BIVARIATE TABLE of COLUMN 105 vs COLUMN 114

FREQUENCY TABLE												
ZERO E-T	(21)L	(24)O	(25)P	(26)Q	(28)S	(29)T	(30)U	(31)V	(32)W	(33)X	(35)Z	
1	2	1	1	0	0	0	0	0	0	0	0	4
3	0	0	0	1	1	2	1	2	1	1	1	10
	2	1	1	1	1	2	1	2	1	1	1	14

BIVARIATE TABLE of COLUMN 105 vs COLUMN 115

FREQUENCY TABLE							
ZERO E-T	(14)E	(16)G	(17)H	(18)I	(19)J	(20)K	(22)M
1	3	0	1	0	0	0	0
3	0	2	1	3	2	1	1
	3	2	2	3	2	1	1

BIVARIATE TABLE of COLUMN 105 vs COLUMN 116

FREQUENCY TABLE								
ZERO E-T	7	8	(10)A	(11)B	(12)C	(13)D	(14)E	(15)F
1	2	1	1	0	0	0	0	0
3	0	0	2	1	4	1	1	1
	2	1	3	1	4	1	1	1

BIVARIATE TABLE of COLUMN 105 vs COLUMN 117

FREQUENCY TABLE						
ZERO E-T	0	3	4	5	6	7
1	1	1	2	0	0	0
3	0	0	0	1	8	1
	1	1	2	1	8	1

BIVARIATE TABLE of COLUMN 105 vs COLUMN 118

FREQUENCY TABLE						
ZERO E-T	3	5	6	7	8	(11)B
1	1	1	1	1	0	0
3	0	0	1	4	4	1
	1	1	2	5	4	1

BIVARIATE TABLE of COLUMN 105 vs COLUMN 119

FREQUENCY TABLE									
ZERO E-T	0	7	8	9	(10)A	(11)B	(12)C	(13)D	
1	1	1	1	1	0	0	0	0	4
3	0	0	1	1	3	2	2	1	10
	1	1	2	2	3	2	2	1	14

BIVARIATE TABLE of COLUMN 105 vs COLUMN 120

FREQUENCY TABLE				
ZERO E-T	3	4	5	6
1	3	0	1	0
3	1	4	2	3
	4	4	3	3

BIVARIATE TABLE of COLUMN 105 vs COLUMN 121

FREQUENCY TABLE												
ZERO E-T	(26)Q	(31)V	(34)Y	(37)	(38)†	(39).	(40)<	(42)+	(44)&	(47)*	(54)%	
1	1	2	0	1	0	0	0	0	0	0	0	4
3	0	0	1	0	2	1	2	1	1	1	1	10
	1	2	1	1	2	1	2	1	1	1	1	14

BIVARIATE TABLE of COLUMN 105 vs COLUMN 122

FREQUENCY TABLE													
ZERO E-T	(23)N	(28)S	(29)T	(30)U	(33)X	(34)Y	(35)Z	(36)_	(37)	(39).	(42)+	(47)*	
1	1	1	1	0	1	0	0	0	0	0	0	0	4
3	0	0	0	1	0	1	3	1	1	1	1	1	10
	1	1	1	1	1	1	3	1	1	1	1	1	14

BIVARIATE TABLE of COLUMN 105 vs COLUMN 123

FREQUENCY TABLE					
ZERO E-T	2	3	4	5	7
1	1	2	1	0	0
3	0	2	2	5	1
	1	4	3	5	1

BIVARIATE TABLE of COLUMN 105 vs COLUMN 124

FREQUENCY TABLE										
ZERO E-T	4	5	6	7	8	9	(10)A	(11)B	(12)C	
1	2	0	1	1	0	0	0	0	0	4
3	1	1	0	2	1	2	1	1	1	10
	3	1	1	3	1	2	1	1	1	14

BIVARIATE TABLE of COLUMN 105 vs COLUMN 125

FREQUENCY TABLE						
ZERO E-T	3	4	6	7	9	(10)A
1	2	1	1	0	0	0
3	0	0	6	2	1	1
	2	1	7	2	1	1

BIVARIATE TABLE of COLUMN 105 vs COLUMN 126

FREQUENCY TABLE							
ZERO E-T	2	3	4	5	6	8	9
1	1	1	1	0	0	1	0
3	0	0	3	3	2	1	1
	1	1	4	3	2	2	1

BIVARIATE TABLE of COLUMN 105 vs COLUMN 127

FREQUENCY TABLE										
ZERO E-T	(22)M	(24)O	(26)Q	(27)R	(28)S	(29)T	(30)U	(31)V	(33)X	(34)Y
1	1	2	0	1	0	0	0	0	0	0
3	0	0	1	1	1	1	2	2	1	1
	1	2	1	2	1	1	2	2	1	1

BIVARIATE TABLE of COLUMN 105 vs COLUMN 128

FREQUENCY TABLE									
ZERO E-T	(17)H	(19)J	(20)K	(21)L	(22)M	(23)N	(24)O	(25)P	(26)Q
1	1	1	1	1	0	0	0	0	0
3	0	0	0	2	1	2	2	2	1
	1	1	1	3	1	2	2	2	1

BIVARIATE TABLE of COLUMN 105 vs COLUMN 129

FREQUENCY TABLE							
ZERO E-T	3	5	6	7	8	9	
1	1	2	0	1	0	0	4
3	0	2	4	2	1	1	10
	1	4	4	3	1	1	14

BIVARIATE TABLE of COLUMN 105 vs COLUMN 130

FREQUENCY TABLE					
ZERO E-T	5	7	8	9	
1	1	3	0	0	4
3	0	3	6	1	10
	1	6	6	1	14

BIVARIATE TABLE of COLUMN 105 vs COLUMN 131

FREQUENCY TABLE				
ZERO E-T	0	2	3	4
1	1	2	1	0
3	0	4	3	3
	1	6	4	3

BIVARIATE TABLE of COLUMN 105 vs COLUMN 132

FREQUENCY TABLE					
ZERO E-T	3	4	5	6	7
1	2	1	1	0	0
3	0	5	2	2	1
	2	6	3	2	1

BIVARIATE TABLE of COLUMN 105 vs COLUMN 133

FREQUENCY TABLE											
ZERO E-T	(29)T	(32)W	(33)X	(34)Y	(36)_	(37)	(38)†	(39).	(41)((43)	(53),
1	1	1	0	1	0	0	0	1	0	0	0
3	1	0	1	0	1	1	2	1	1	1	1
	2	1	1	1	1	1	2	2	1	1	1

BIVARIATE TABLE of COLUMN 105 vs COLUMN 134

FREQUENCY TABLE												
ZERO E-T	(24)O	(26)Q	(29)T	(30)U	(32)W	(33)X	(34)Y	(35)Z	(38)F	(39).	(45)I	
1	0	1	1	1	0	1	0	0	0	0	0	4
3	1	0	1	0	1	2	1	1	1	1	1	10
	1	1	2	1	1	3	1	1	1	1	1	14

BIVARIATE TABLE of COLUMN 105 vs COLUMN 135

FREQUENCY TABLE					
ZERO E-T	1	2	3	4	5
1	1	3	0	0	0
3	0	2	6	1	1
	1	5	6	1	1

BIVARIATE TABLE of COLUMN 105 vs COLUMN 136

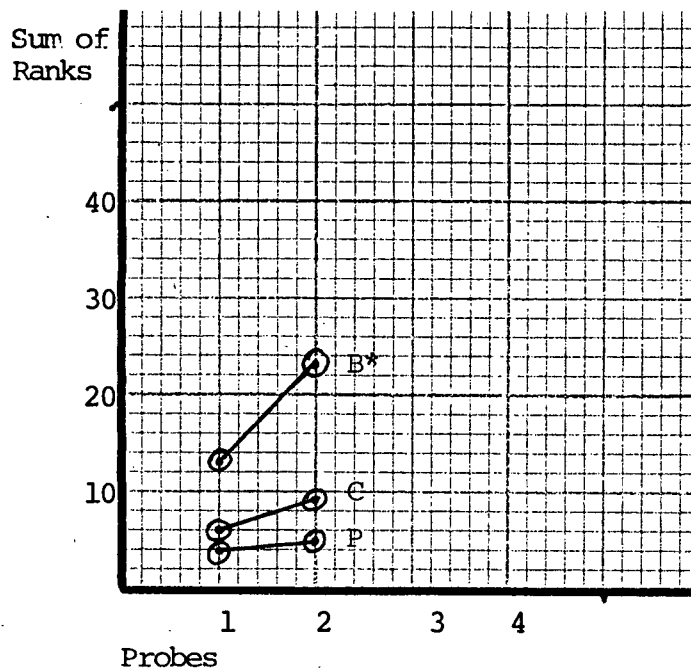
FREQUENCY TABLE								
ZERO E-T	5	8	9 (10)A	(11)B	(13)D	(14)E	(16)G	
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3	0	2	1	3	1	1	1	10
	2	3	2	3	1	1	1	14

TIME FOR TABLE PRINTING:
0.199 CPU sec.

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6 0302321
7 0401232422222223222220223244323242322222422242222222230002222421
8 0402321
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24 1502122
25 16011322222111234222232224222232332224144322242423222424222222220002232423
26 1602321
27 170112122221122332132222232233322200000222422242224242222223230002232421
28 1702321
End of file

APPENDIX 11

CASE 1

Case 1. involves a single parent mother in which two probes are available at intake and transfer to Access stages.

Parental Perceptions of Behaviour

In this particular case, the mother's scores on the questionnaire related to her child's behaviour increase from a sum of ranks of 13 at Probe 1 to a sum of ranks of 23 at Probe 2, or transfer to Access. These results were significant at the .01 level of probability with 1 degree of freedom. Then this researcher looked at the probability of .20, the results are still significant, indicating that the change between the responses of the mother at Probe 1 and at Probe 2 represents significant improvement in her assessment of the child's behaviour.

The fact that these results are significant indicates that this improvement could not have occurred by chance alone and that the results obtained by

the Friedman test rule out chance as a factor in accounting for the large increase in the mother's assessment of her child's behaviour at Probe 2. As a result, in this case it is possible for this researcher to conclude that the reported difference in the child's behaviour from intake to transfer to Access may be attributed to some factor other than chance.

In looking at the specific scores within the first questionnaire it is important to note that some of the scores such as the child's compliance and willingness to accept directions improve significantly. In other areas his ability to cooperate and play with others and get along with others also demonstrated a significant improvement from Probe 1 to Probe 2. The child also demonstrated a marked improvement in adhering to routines between the two probes.

When the sum of ranks for this particular case are charted on a graph it is possible to see how rapidly the child demonstrated improvement from Probe 1 to Probe 2 reflects a significant difference in the mother's assessment of the child's behaviour. These results indicate that the sum of ranks for these two probes are different for two points in time. In other words, in interpreting these results it is possible to say that this mother's assessment of her child at Probe 2 has changed significantly from her original assessment of her child at Probe 1. The child that she views at Probe 1 has numerous problems that she has identified. The child that she is assessing at Probe 2 has changed his behaviour and is not as problematic as she identified earlier at the intake stage. This change cannot occur by chance since the statistical analyses have ruled out chance as a factor in this case.

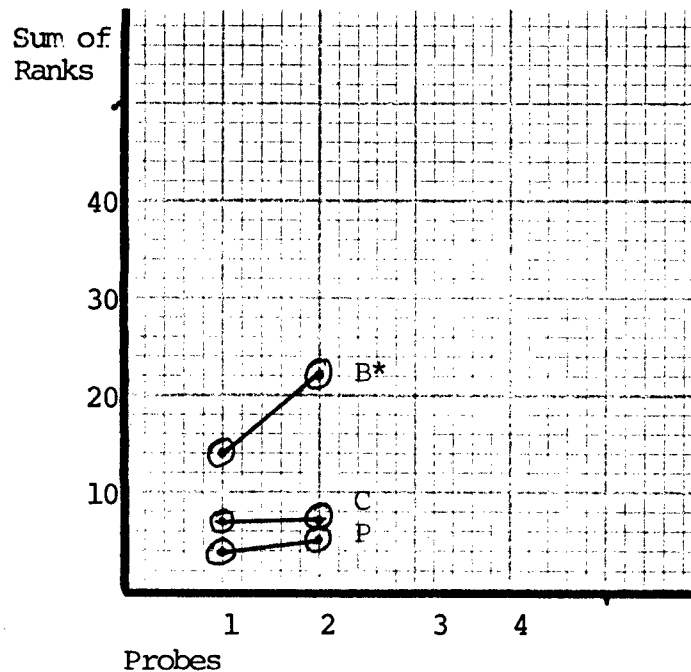
Thus, this researcher is able to conclude that the child has changed since coming to Children's Foundation. The null hypothesis in this situation which states that there would be no difference in the scores between Probes 1 and 2 can be rejected. The difference that exists is significant. It is therefore possible for this researcher to conclude that something either at the Children's Foundation or at the child's home has changed the child's behaviour and the mother's assessment of his behaviour. As a single-case study, thus, it is possible to conclude that this particular case demonstrates that a child has modified his behaviour since his mother feels more positive about the type of behaviour that the child is displaying.

Parental Perceptions of Self

The results for Questionnaire 2 which reflect the mother's feelings about parenting are insignificant. In other words, the difference between the mother's attitudes towards parenting at Probe 1 and Probe 2 were slight but these changes could have occurred by chance alone. As a result, it is not possible to conclude that even though the data shows a trend towards an increase in the sum of ranks, this increase could have occurred by chance alone.

Child's Perceptions of Self

The child's assessment of himself on Questionnaire 3 from intake to transfer to Access were also insignificant. The Friedman test produced a result of 1.8 for a probability of .522. While the sum of ranks appears to indicate an improvement from a score of 6 to a score of 9 between Probes 1 and 2, this difference cannot be assumed to be large enough to conclude that the child's self-concept has improved. These differences could occur by chance alone.

CASE 2

Case 2 is a single parent in which the mother completed two probes, Probes 1 and 2.

Parental Perceptions of Behaviour

The mother's responses to Probes 1 and 2 on Questionnaire 1 increased respectively so that the sum of ranks for Probe 1 equalled 14 and the sum of ranks for Probe 2 equalled 22. The Friedman results for this particular questionnaire were significant at the level of .02 probability. This again allows this researcher to conclude that the changes observed in the sum of ranks are sufficient to conclude that the child's behaviour improved significantly enough for the mother to notice it. These differences in the sum of ranks could not have occurred by chance alone. The apparent increases in the sum of ranks were most noticeable under the categories of

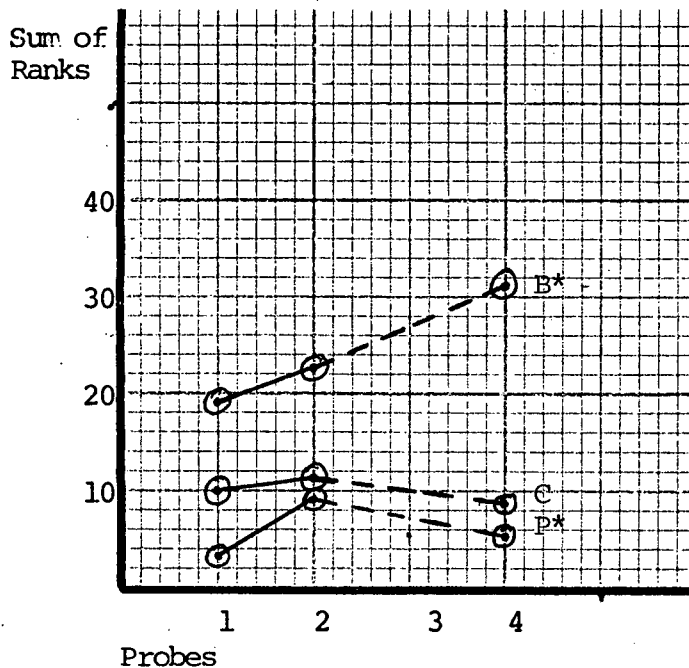
the child complying with parental requests, accepting direction, showing thoughtfulness, improving his hygiene and eating habits and adhering to routines.

Parental Perceptions of Self

Once again, the results for Questionnaire 2 were insignificant, although the sum of ranks did increase from 4 to 5 for Probes 1 and 2 respectively. Once again, because the Friedman test could not provide significant results these differences could have occurred by chance alone. In looking at the particular scores for the questionnaire it is worth noting that this particular mother's feelings about parenting did increase significantly, while her attitudes towards parenting decreased from Probe 1 to Probe 2. This change, however, cannot be said to be significant, since the sum of ranks for this entire questionnaire are insignificant.

Child's Perceptions of Self

The results for Questionnaire 3 are insignificant in this particular case. In fact, the sum of ranks for Probes 1 and 2 are exactly equal at 7.5 each. As a result it is impossible to draw any significant conclusions from this particular case.

CASE 3

This particular case involves a single parent mother on which three probes are available, one at intake, one at transfer to Access and a follow-up probe six months after discharge.

Parental Perceptions of Self

The sum of ranks for this case were significant at the .05 level of probability with 2 degrees of freedom. It is worth noting that over time this particular mother's appraisal of her child's behaviour demonstrated a continual improvement from scores of 18.5, 22.5 to 31.0 as the sum of ranks for each of the three probes. In reviewing the data on the chart for this particular case, it is possible to observe that this case appears to demonstrate a consistent line of improvement from Probe 1 to Probe 4. However, the data between Probe 2 and Probe 4 can only be speculated at since no measurements are available for the third probe. If, however, this researcher

is to extend the slope of the line from Probes 1 and 2 to Probe 4 it appears to produce a straight line indicating consistent improvement of this particular child over time. Once again, in this case the results are significant well beyond the .20 level of probability indicating that this change in behaviour could not have occurred by chance alone.

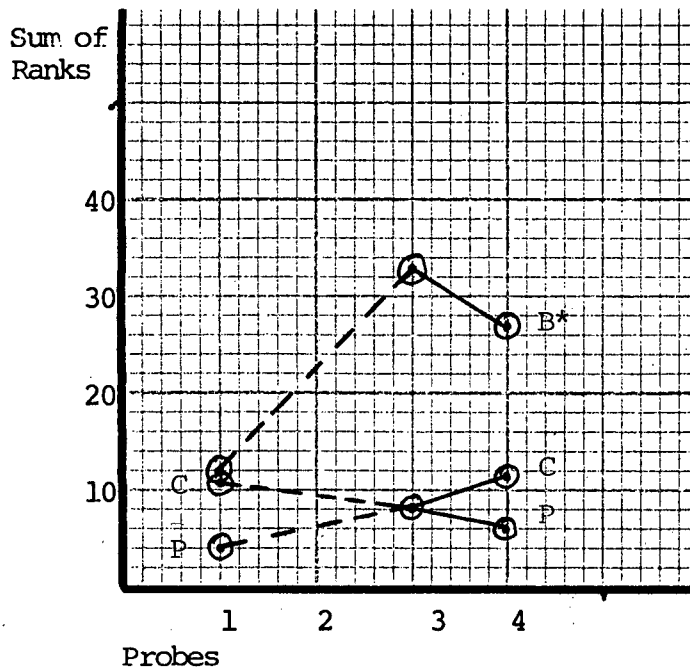
Parental Perceptions of Self

The results for Questionnaire 2 are again significant at the .194 level of probability. On this particular questionnaire the sum of ranks increased from 3.5 to 9 then dropped to 5.5 for the fourth probe. While this particular data is significant it is worth noting that after the client had been discharged from the Foundation her attitudes and feelings towards parenting dropped significantly. Despite the drop, however, the sum of ranks demonstrates that the scores obtained at follow-up indicate that the mother's feelings about parenting are still higher than they were at intake. This would lead one to conclude that this mother had gained something from the Children's Foundation and was feeling better about her role as a parent.

Child's Perceptions of Self

The results for Questionnaire 3 were significant at the .691 level of probability. As a result, it is not possible to conclude that the child's feelings about himself or his relationship with other areas of his life improved at all. These results could have occurred as a result of chance alone. In fact, in looking at the sum of ranks it is possible to see that the sum in fact decreased to a lower sum of ranks at the six month follow-up than was observed when the child initially came to Children's Foundation. In

reviewing the particular areas it is worth noting that the child's feelings about school and his feelings of confidence were the two areas that decreased at the six month probe. The probability of .691 indicates that these results could have easily occurred by chance alone so that the apparent down trend in the data may or may not be important for this particular child.

CASE 4

Case 4 represents a single parent mother in which three probes are available at intake, at discharge and at follow-up.

Parental Perceptions of Behaviour

The trend in the data shows a significant increase in the sum of ranks from intake to discharge with a slight decrease after discharge at the six month follow-up. The result of this particular probe was significant at the .001 degree of significance with 2 degrees of freedom. Again, the data between Probe 1 and Probe 3 can only be speculated at since no measurement is available at Probe 2 when the child was transferred to Access. However, the sum of ranks indicates a significant increase in the mother's appraisal of her child's behaviour at Probe 3. This increase is large enough to be significant indicating that it could not have occurred by chance alone.

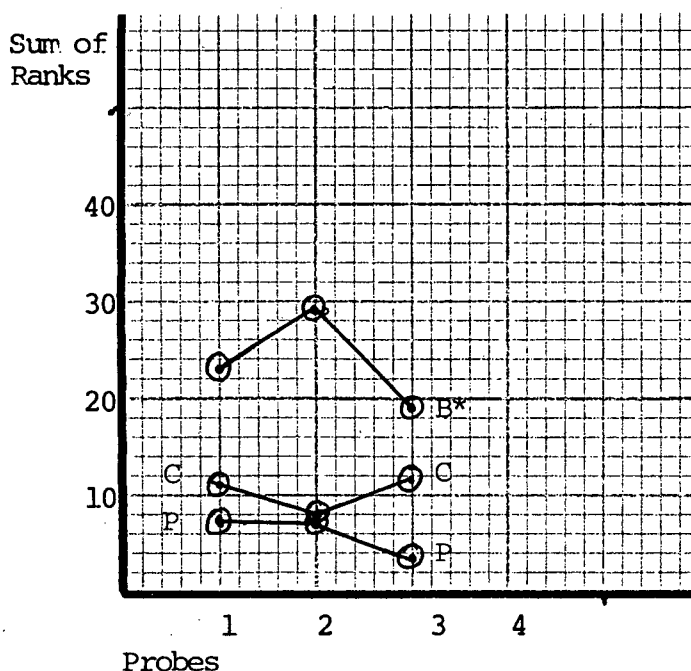
This leaves this researcher with the conclusion that this particular child's behaviour did improve significantly from intake to discharge. Again, despite decline in the data after discharge at the six month follow-up decline is still well above the initial level at intake. In reviewing the data it is worth noting that despite the decline a majority of behaviours were still rated as being higher at follow-up than originally at intake. By looking at the data more closely it is possible to observe that all the child's behaviours at follow-up remained at a level higher than those at intake which demonstrates that the child still is behaving significantly better than he was doing when he first was admitted to the Children's Foundation.

Parental Perceptions of Self

The sum of ranks for Questionnaire 2 or the mother's attitudes and feelings about parenting were again insignificant despite a marked increase from Probe 1 to Probes 3 and 4. The probability of obtaining such results was .361 or 36 per cent of the time that such results could occur by chance alone. As a result, it is not possible to conclude that this parent demonstrated significant improvement in her feelings and attitudes towards parenting through her contact with the Children's Foundation. Again, the rapidity of the change between Probes 1 and 3 can only be speculated at since no mid-point data are available to demonstrate the degree to which this parent improved in her feelings and attitudes about parenting. The change between discharge and follow-up however can be concluded to be declining since these two probes are consecutive.

Child's Perceptions of Self

The results for Questionnaire 3 are insignificant with the probability of obtaining the same results by chance alone of .691. Consequently it is not possible to obtain any useful data from this particular questionnaire other than to observe any trend that might appear in the sum of ranks. In reviewing this sum of ranks it is possible to note that the sum of ranks increase across time beginning at 10.5 at Probe 1, dipping to 8 at Probe 3 and increasing to 11.5 at Probe 4. Once again, this data is highly speculative since Probe 2 is missing in this sequence and the exact nature of this child's feelings about himself are uncertain, particularly with this probe missing.

CASE 5

Case 5 represents the case of a single parent mother on which three consecutive probes are available, Probes 1, 2 and 3.

Parental Perceptions of Behaviour

The results of these probes are significant at the .15 level of probability with 2 degrees of freedom. However, the significant trend in these particular results demonstrate that the sum of ranks decreases between the transfer to Access and the discharge probes. In fact, in this case the sum decreases to a level lower than that previously demonstrated at the intake process.

In looking at the specific behaviours it is possible to see that a number of the behaviours including accepting direction, trustworthiness, thoughtfulness, hygiene, eating and following routines decrease to a point below those at which the child was functioning on admission to the Children's Foundation. Only one behaviour, showing respect, appears to have improved

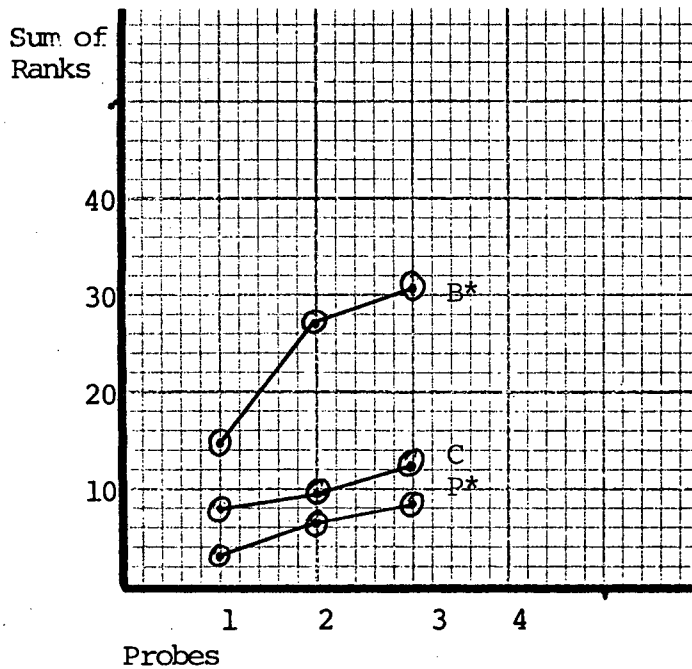
between intake and discharge while the balance of the behaviours demonstrate decreases at discharge.

Parental Perceptions of Self

In this particular case the parent's responses to the questionnaire about parenting and attitudes to parenting decreases from Probe 1 to Probe 3. The results, however, are insignificant so that such changes could occur by chance alone. The probability of obtaining such results is .361 which is well beyond the probability level set by this research project of .20. Consequently, these results are of little use to this research project.

Child's Perceptions of Self

The results for Questionnaire 3, the child's feelings about himself, are again insignificant with a probability of .522. Consequently, it is not possible to obtain any useful information from this data other than to observe that the sum of ranks at intake and at discharge are approximately equal at 11 and 11.5 respectively.

CASE 6

Case 6 represents a single parent on which three probes are available, Probes 1, 2 and 3.

Parental Perceptions of Behaviour

The data collected is significant at the .01 level of probability with 2 degrees of freedom. In general, the data shows a trend towards increasing the sum of ranks from 14.5 to 27.0 to 30.5 at Probes 1, 2 and 3 respectively. Since this data is significant at the .01 level it is possible to say that these results could not have been obtained by chance alone. As a result, it is possible to conclude that this particular parent has observed or is reporting an apparent improvement in her child's behaviour from intake to discharge at the Children's Foundation. In observing the graph data it is possible to see that the improvement increased rapidly from initial intake to transfer to Access and a trend towards improvement continued during the Access contact that this family had with the Children's Foundation, but

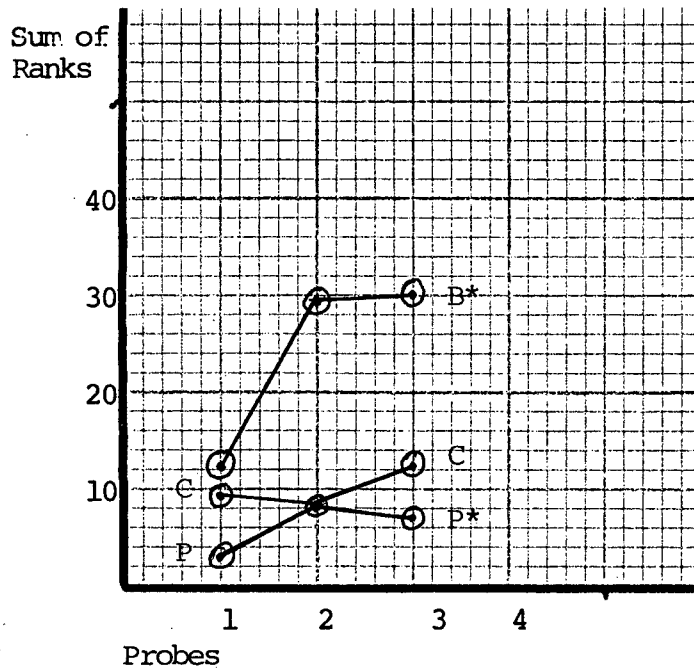
that this improvement occurred at a somewhat slower rate. As a result, it is possible to conclude from these particular results that this parent observed significant improvements in her child's behaviour during the contact that she had with the Children's Foundation.

Parental Perceptions of Self

The results for Questionnaire 2 in this particular case were also significant at the .194 level of probability. The sum of ranks increased from 3 to 6.5 to 8.5 for the three probes respectively. As a result, it is possible to conclude that this parent demonstrated an improved sense of functioning around parental attitudes to children, feelings about parenting and problem solving techniques. Again, in observing the graphed data it is possible to see that the trend towards improvement continued on a more or less even curve and that it in fact continued during the Access period that the parent had contact with the agency.

Child's Perception of Self

The results of Questionnaire 3 were insignificant with the probability of .522 despite the fact that the sum of ranks increase from 8 to 9.5 to 12.5 at Probes 1, 2 and 3 respectively. This apparent improvement was not as significant when submitted to Friedman testing so it is not possible to conclude that these changes represent any significant improvement in the child's feelings about himself or his environment.

CASE 7

Case 7 represents the case of a single parent mother in which three probes were available at intake, transfer to Access and discharge.

Parental Perceptions of Behaviour

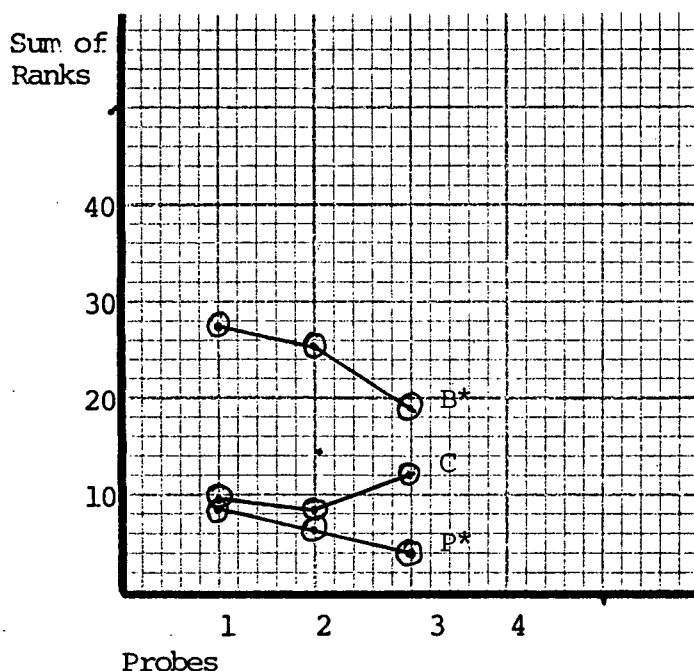
The probes are demonstrated in an improvement from 12.5, to 29.5 to 30.0 at Probes 1, 2 and 3 respectively. The results were significant at the .001 level of significance with 2 degrees of freedom. As a result, it is possible to conclude in this case that this parent observed and reported a significant improvement in her child's behaviour from the time the child was admitted to Children's Foundation to the time that the child was discharged from the Foundation. In observing the graph of this particular client it is worth noting that the continued improvement from transfer to Access to discharge was slight, such that it is likely that improvement was almost negligible but that no deterioration in the child's behaviour was reported by the parent.

Parental Perceptions of Self

The results of Questionnaire 2 were again significant at the .194 level of probability, as the sum of ranks showed an improvement from 3 to 8 to 7 for Probes 1, 2 and 3 respectively. In observing these particular trends it is worth noting that in fact the sum of ranks dropped off at the discharge point in time, but still maintained a level higher than that at intake. Once again, this demonstrates an apparent improvement in the parent's feelings about parenting and her attitudes to children and problem solving techniques.

Child's Perceptions of Self

The results for Questionnaire 3 were insignificant at .367 level of probability. The results demonstrated a fluctuation from 9.5 to 8.0 to 12.5 at Probes 1, 2 and 3 respectively. However, this variation was not significant enough to enable this researcher to conclude that the changes or fluctuations in the data obtained for this child indicated any real change in the child's feelings about himself or his surroundings.

CASE 8

This case represents a single parent mother on which three probes are available, one each at intake, transfer to Access and discharge.

Parental Perceptions of Behaviour

The results of this particular case were significant at the .20 level of probability with 2 degrees of freedom. However, in observing the data it is important to notice that this data is significant and yet shows a decline in the sum of ranks from intake through to discharge. The sum of ranks at intake is 27.5 which declines to 25.5 at transfer to Access and 19.0 at discharge. These results are significant enough to lead this researcher to conclude that this particular parent assessed the child's behaviour to be deteriorating over time. However, it is worth noting that the most significant deterioration occurs after transfer from Access to the period that the child is discharged. As a result, it is possible to speculate that this particular child left the Foundation and its structured setting and

returned to many of his previously problematic behaviours with a result that the mother observed more problematic behaviours in the child after he was returned home and she had only weekly contact with the Children's Foundation.

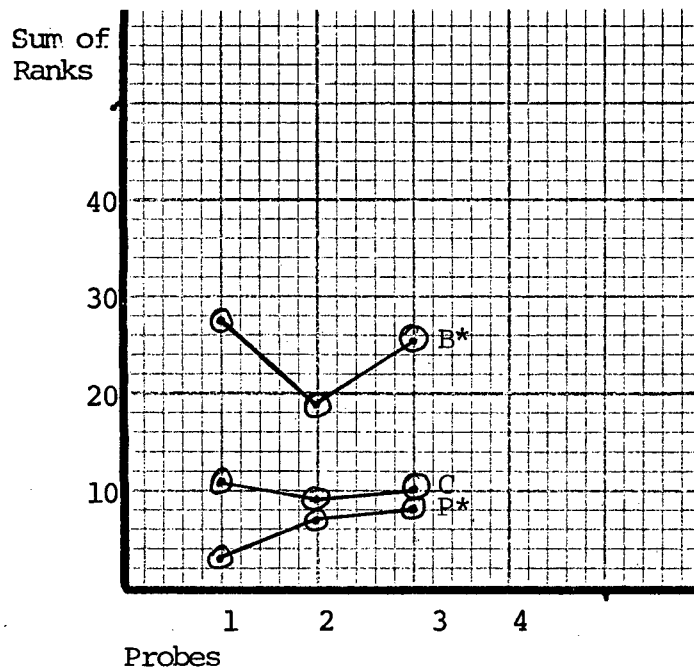
Parental Perceptions of Self

On Questionnaire 2 it is worth noting that the results were again significant at the .028 level of probability and that the results again showed a decline from 8.5 to 6.5 to 4.0 at Probes 1, 2 and 3. As a result, this parent's feelings about parenting showed a marked deterioration the longer she had contact with Children's Foundation. This, incidently, coincides with the apparent recognition of more problematic behaviour as this parent worked with the Children's Foundation over time. The child's behaviour deteriorated after transfer to Access and at discharge and the parent's feelings about parenting similarly reflected a gradual decline over this time. It is therefore possible to conclude that in this case it would appear that both the parent's feelings about parenting and the child's actual behaviour are deteriorating over time especially after the child is transferred to the Access program

Child's Perceptions of Self

The results for Questionnaire 3 were again insignificant at a .691 level of probability. In observing the above trends, however, it is worth noting that the child's feelings about himself and the sum of ranks increased at discharge. The sum of ranks started at 9.5 for Probe 1, to 8.5 for Probe 2, to 12.0 at Probe 3. Thus, this particular child appears to demonstrate an improved sense of self despite the parent's apparent decline in feelings

about parenting and recognition of more problematic behaviours in the child. In this particular case it would be interesting to complete the follow-up study and determine which of the two perspectives on the progress made in this case are correct - the parent's or the child's. Is the parent simply noting a more independent child who is better able to cope by himself and therefore feeling less in control and less able to cope, or is the parent observing a more out of control child over whom she has no control? A number of hypotheses might be speculated about this particular case and the implications of the data results here.

CASE 9

This is a single parent family in which three probes are available at intake, transfer to Access and discharge.

Parental Perceptions of Behaviour

The results of Questionnaire 1 are significant at the .20 level of probability with 2 degrees of freedom. The degree of significance in this particular case, however, is interesting since the sum of ranks starts at 27.5 at Probe 1, drops to 19.0 at Probe 2 and rebounds to 25.5 at discharge.

As a result, this case demonstrates an apparent deterioration in the child's behaviour between admission and transfer to Access with some improvement after the child is on the Access program.

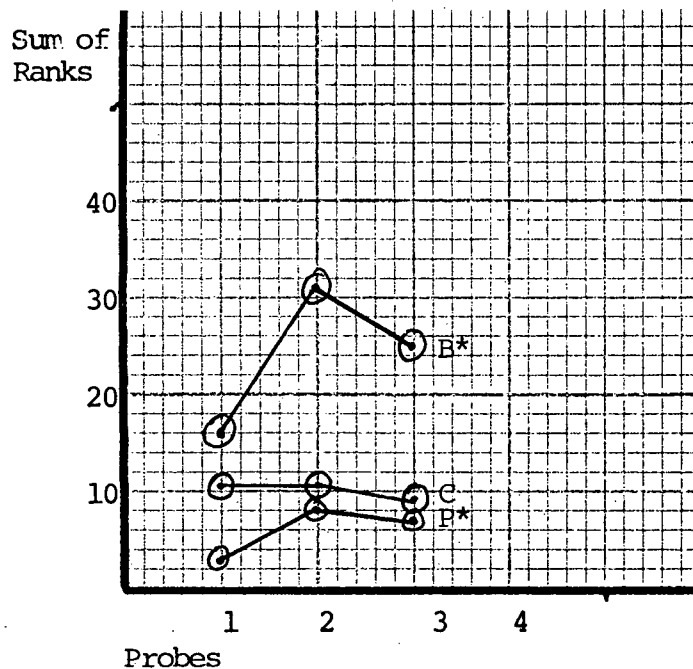
Parental Perceptions of Self

The results of Questionnaire 2 are significant at the .194 level with the parent's sense of parenting improving gradually over the three probes. The sum of ranks moves from 3 to 7 to 8 for Probes, 1, 2 and 3 respectively. This represents a gradual improvement of the parent's feelings and attitudes towards parenting over the time that the parent had contact with the Children's Foundation. In addition, since the results are significant it is possible to assume that these occurrences could not have occurred by chance and therefore the parent is feeling better about parenting.

Child's Perceptions of Self

The results of Questionnaire 3 were insignificant with a probability of .954 of achieving the same results as indicated on the test. The sum of ranks started at Probe 1, dropped to 9 at Probe 2 and increased to 10 at Probe 3.

Despite the fact that the child's sense of self or self-concept is insignificant on the results obtained it is worth noting that his self-concept demonstrates a similar pattern to that of his behaviour as reported by the parent. Between intake and transfer to Access program, or in other words while the child is in residence at the Foundation, his behaviour and his self-concept both seem to decrease while the behaviour and his self-concept improve once he is returned home and transferred to the Access program. These trends appear to be directly opposite to the parent's increasing sense of confidence and improving attitudes towards parenting, and may reflect significant changes in this particular family.

CASE 10

This case involves a single parent mother on which three probes are available at intake, transfer to Access and discharge.

Parental Perceptions of Behaviour

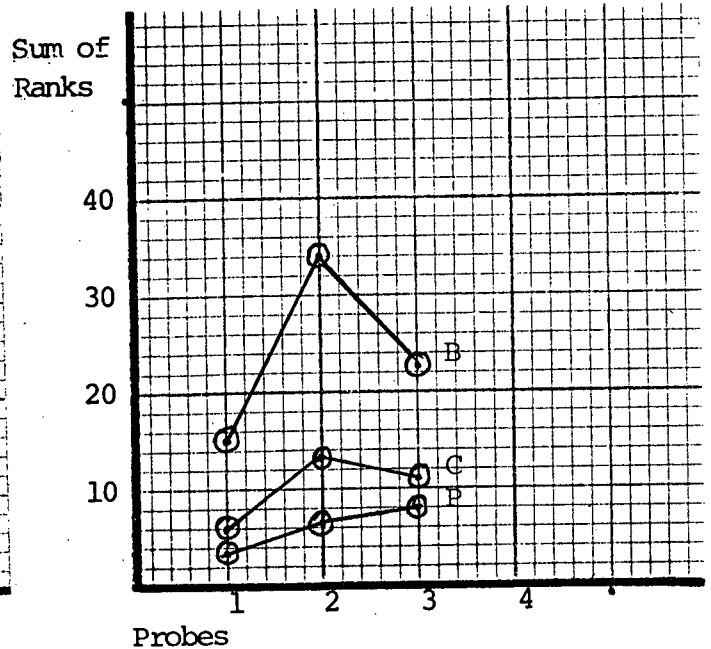
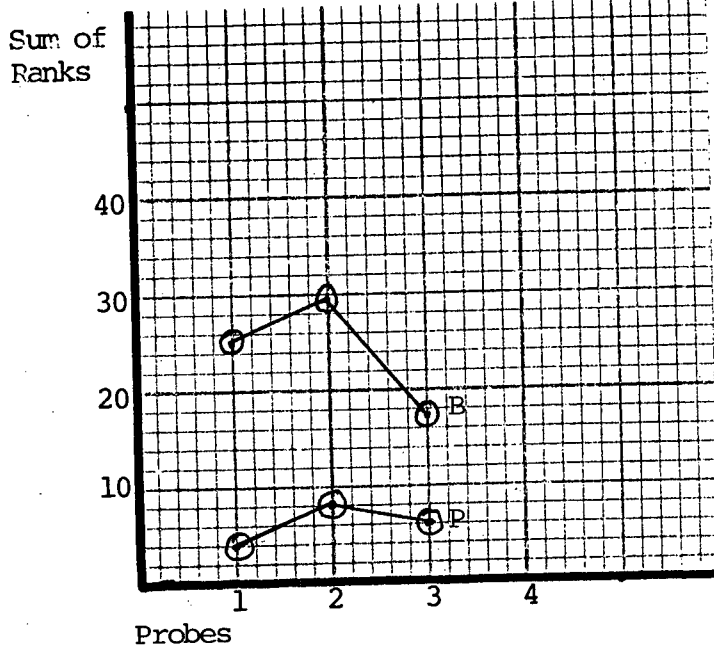
The sum of ranks on this particular Questionnaire (1) increases from 16 to 31 and drops to 25 at Probes 1, 2 and 3 respectively. The results of this particular test are significant at the .01 level of probability with 2 degrees of freedom. It is interesting to note on the chart that the behaviour improves drastically between intake and transfer to Access, then quickly declines after discharge and return to the family. However, the change in behaviour maintains itself apparently at a higher level of acceptability to the parent after transfer to Access which would appear to indicate that not all changes gained through treatment have been lost.

Parental Perceptions of Self

The results of Questionnaire 2 are significant at the .194 level of probability with the parent demonstrating an improved sense of parenting from intake through to discharge. The sum of ranks increases from 3 to 8 and drops to 7 at Probes 1, 2 and 3 respectively. As a result, it demonstrates a slight dip in the parent's confidence once the parent is transferred to Access, however, this is a slight dip. In addition, the parent's sense of parenting appears to stabilize or end at a higher level of performance than when the parent first came to Children's Foundation.

Child's Perceptions of Self

The results for Questionnaire 3 were insignificant with a .954 level of probability of obtaining the same results by chance alone. The results for this test on the child's self-concept were almost static with a sum of ranks of 10.5 for Probes 1 and 2 with a slight drop to 9.0 on Probe 3. It is interesting to note in this case that after transfer to Access the behaviour, the child's self-concept and the parent's feelings about parenting all decrease once the family is transferred. Their feelings at follow-up, thus, represent lower levels of confidence than the point they reached at transfer to Access.

CASE 11

This particular case involves a two parent family in which three probes are available at intake, transfer to Access and discharge.

Parental Perceptions of Behaviour

The father's responses to Questionnaire 1 are significant at the .05 level of probability with two degrees of freedom. It is worth noting a particular trend in the father's assessment of behaviour in that the behaviour appears to improve while the child is a resident of Children's Foundation but drastically declines once the child is returned home and transferred to the Access program. The mother's assessment of this particular child's behaviour demonstrates similar improvement and is significant at the .20 level of probability with 2 degrees of freedom. The mother's sum of ranks increases from 15 to 34 back to 22.5 at Probes 1, 2 and 3 respectively. The mother demonstrates similar trends in her assessment of the child's behaviour in

that the behaviour appears to be improving at a rapid trend while the child is in residence at Children's Foundation, but declines drastically once the child is returned home and transferred to Access.

Parental Perceptions of Self

On the parenting scale the father's results are insignificant at a .361 level of probability. An interesting trend in the sum of ranks is observable since the father's feelings about parenting improve between intake and transfer to Access, but decline after transfer to Access and discharge. The mother's responses to this particular questionnaire are insignificant as well, with a .361 probability of obtaining similar scores to those on the questionnaires. Once again, it is worth noting that the mother's sense of parenting improves quite rapidly during the period between intake and transfer to Access. However, in this particular case her feelings about parenting continue to improve slightly after the child is returned home and transferred to Access. This trend is somewhat different than the father's, whose feelings about parenting decline once the child is returned home.

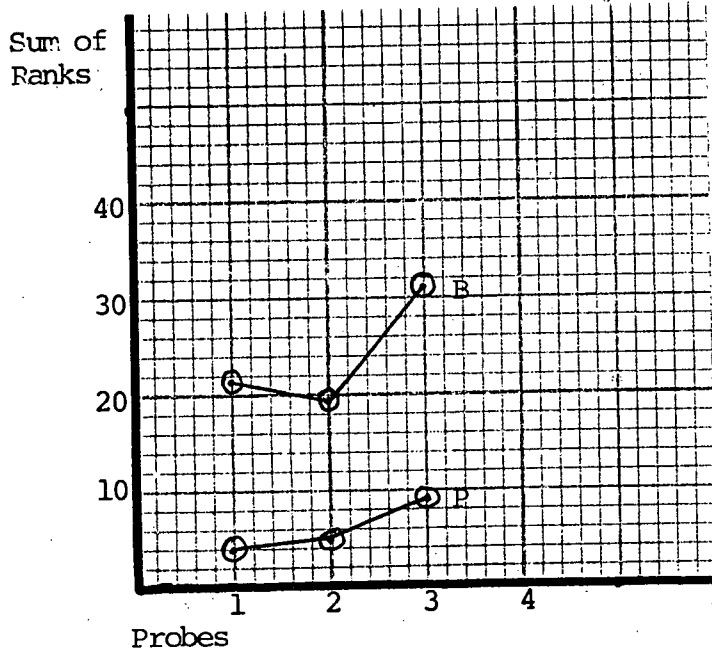
Child's Perceptions of Self

The child's self-concept scale in this particular case is significant at the .093 level of probability. It is interesting to note that the child's self-concept improves between intake and transfer to Access but, like his parents' assessment of his behaviour, declines once he is returned home and transferred to the Access program. The sum of ranks for this particular child start with 6, move to 13 and drop to 11 for Probes 1, 2 and 3

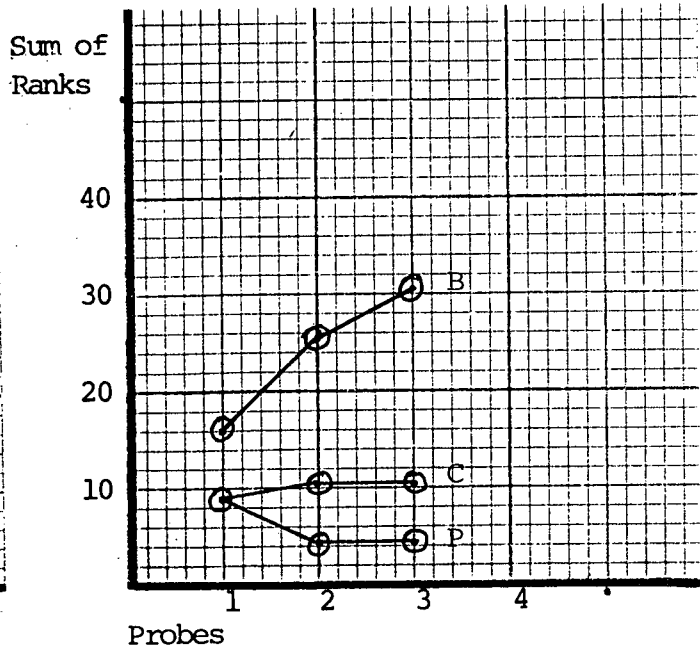
respectively. It is interesting to note that both the child's self-concept and the assessment by both parents of his behaviour decline once he is transferred to Access.

CASE 12

FA



MO



Case 12 involves a two parent family in which three probes are available at intake, transfer to Access and discharge.

Parental Perceptions of Behaviour

The father's responses on this particular questionnaire are significant at the .05 level of probability with 2 degrees of freedom. It is interesting to note that the father's sum of ranks begin at 21.5 at intake, drop to 19.5 when the child is transferred to Access and increase to 31 once the child is on the Access program and continues with Access until discharge. As a result, this child's behaviour seems to improve once he returns home and his parents are working with Children's Foundation on Access only. The mother's scores on this particular questionnaire for the sum of ranks begin at 16.0, move to 25.5 to 30.5 for Probes 1, 2 and 3 respectively. As a result, the mother's assessment of her child's behaviour demonstrates

continuous improvement from intake through to discharge. These results are significant at the .001 level of probability with 2 degrees of freedom.

Parental Perceptions of Self

The father's responses to Questionnaire 2 were significant at the .194 level of probability. The father's responses to attitudes and feelings about parenting demonstrate a progressive increase in appropriate responses from intake to transfer to Access to discharge. As a result, this shows a significant improvement in this particular parent's feelings about parenting.

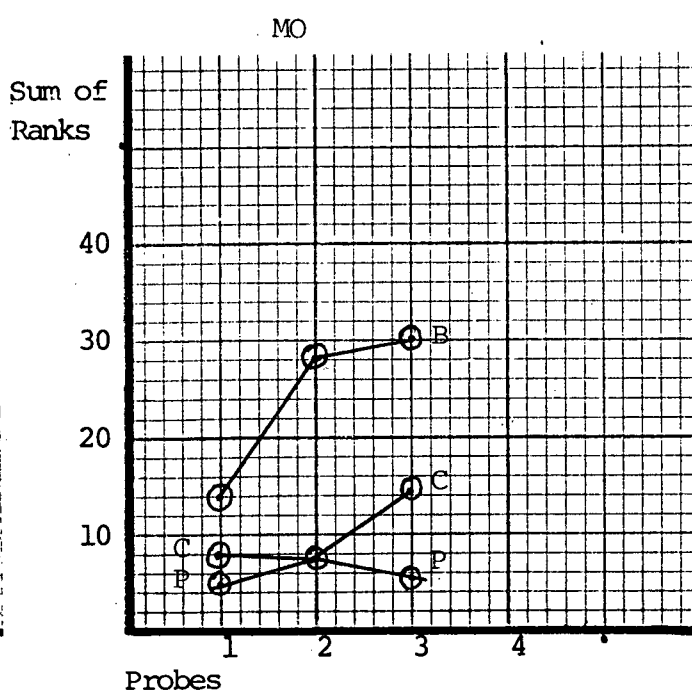
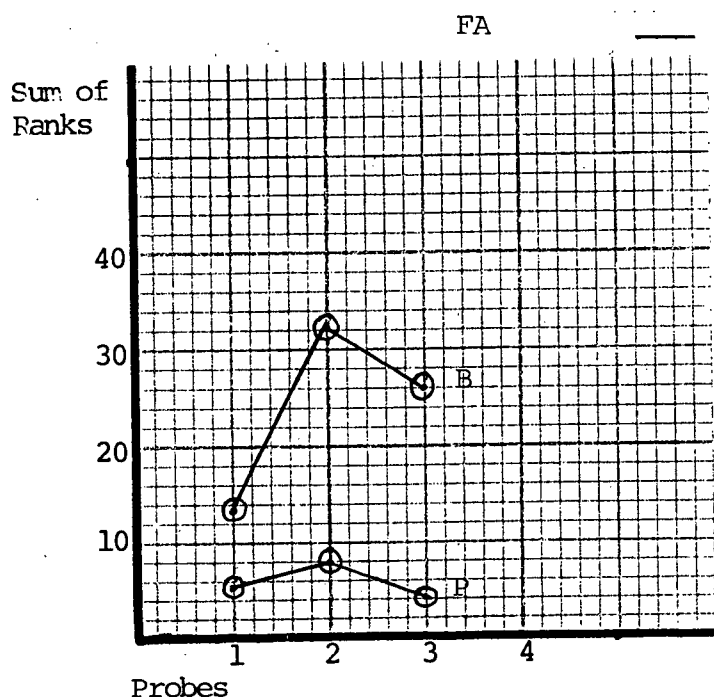
The mother's response to this questionnaire, however, show an opposite trend. Her responses were also significant at the .194 level of probability. However, the sum of ranks began at a high of 9 and decreased to 4.5 for Probes 2 and 3. As a result, this particular parent demonstrated a marked decrease in her feelings about her abilities and attitudes towards parenting her children. This decrease in fact maintained itself from transfer to Access to discharge with no appreciable apparent change. It is worth noting that this particular parent's feelings about parenting moved in a direction opposite to those of her husband.

Child's Perceptions of Self

In this particular family the child's self-concept responses were insignificant with a .954 level of probability of obtaining similar results as those obtained in this particular test. The child's self-concept did increase according to the sum of ranks from 9 at Probe 1 to 10.5 at Probes 2 and 3. It is worth noting that this particular child's sense of self maintained a

pattern similar to that of his mother's feelings about her parenting skills between transfer to Access and discharge.

Overall, this particular family rated the child's behaviour as improving from transfer to Access to follow-up. However, the parents differed on the child's behaviour between the intake and transfer to Access period of time. The mother indicated a marked improvement in her child's behaviour, while the father noted a slight deterioration in the child's behaviour. In addition, these two parents demonstrated different reactions to their feelings about parenting. The father demonstrated an increased sense of his parenting skills and abilities while the mother showed a marked decrease in her feelings about parenting. Despite the fact that the child's self-concept scale is not significant it still demonstrates an interesting trend that his particular self-concept did not change between transfer to Access and discharge, a time when his mother's feelings about her parenting skills also remained the same.

CASE 13

This case involves a two parent family in which three probes are available at intake, transfer to Access and discharge.

Parental Perceptions of Behaviour

The father's responses to this questionnaire are significant at the .001 level of probability with 2 degrees of freedom. It is interesting to note on the graphed behaviour that the father's responses demonstrate a marked improvement in the child's behaviour between intake and transfer to Access and a sharp decline in his assessment of this behaviour after transfer to Access. The sum of ranks begin at 13.5 to 32.5 to 26.0 at Probe 1, 2 and 3 respectively.

The mother's responses to this questionnaire are also significant at the .01 level of probability with 2 degrees of freedom. The sum of ranks move

from 14.0 to 28.0 to 30.0 for Probes 1, 2 and 3, demonstrating a continual improvement in the child's behaviour according to the mother's assessment.

Parental Perceptions of Self

The father's responses to the questions on parenting were not significant in this particular questionnaire with a .528 probability of obtaining a similar score through chance alone. It is worth observing that in fact his feelings about parenting declined after transfer to Access to a level below the level reported at intake. This trend, however, cannot be judged as reliable since the results are insignificant and similar results could have been obtained by chance alone.

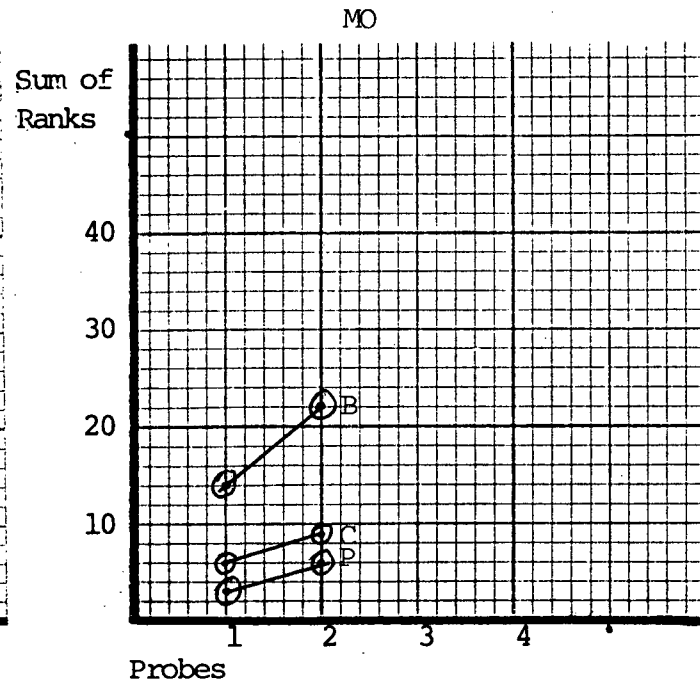
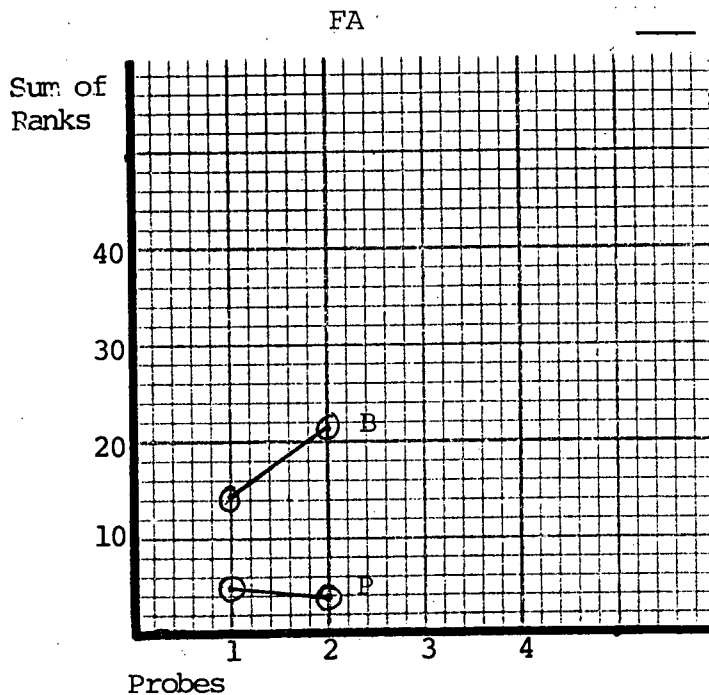
The mother's responses to this particular questionnaire were also insignificant with a .528 probability of obtaining similar scores through chance alone. Again, the mother demonstrated a similar trend in her responses to parenting with a general increase from intake to transfer to Access and a decrease after the child is returned home. Both parents demonstrate similar responses to the questionnaires completed at discharge. This appears to indicate that these parents are not feeling comfortable with their roles of parenting once the child has been returned home and they are left to cope with the child on their own. However, as indicated earlier, this is only a suggested trend since the results are not significant.

Child's Perceptions of Self

The child's self-concept demonstrates a marked improvement from intake to discharge. In this particular case the results are significant at the .039 level of probability. As a result, the difference in the sum of ranks from

8 to 7.5 to 14.5 for Probes 1, 2 and 3 respectively represent a significant improvement in this particular child's self-concept.

It is worth noting that the parents reflect similar attitudes towards parenting in that it begins to improve during the time that the child is resident at the Foundation and declines after the child is discharged to home. In addition, the parents differ on the degree to which the child's behaviour improves. The father and mother both indicate that improvement in behaviour occurs between intake and transfer to Access, but differ on what happens once the child is returned home. The father reflects a decline in behaviour while the mother shows moderate and continuing improvement in the child's behaviour. This leaves only questions to be asked about this particular family and their assessment of their child's behaviour.

CASE 14

This particular case represents a two parent family in which two probes are available at intake, and transfer to Access.

Parental Perceptions of Behaviour

The father's results on Questionnaire 1 are significant at the .05 level of probability with 1 degree of freedom. He demonstrates a marked improvement in the sum of ranks from 14.5 to 21.5 at Probes 1 and 2.

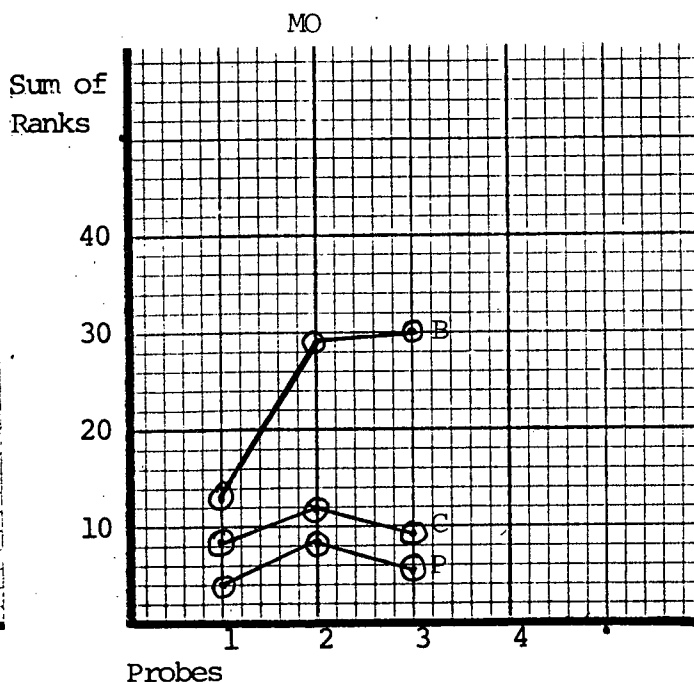
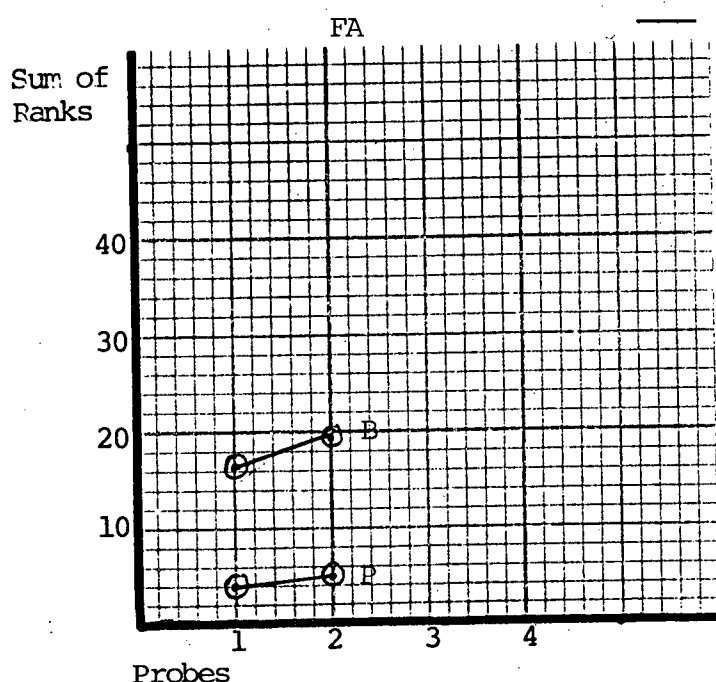
The mother's responses to this particular questionnaire are also significant at the .02 level of probability with 1 degree of freedom. The mother demonstrates a similar assessment of the child's behaviour demonstrating improvement from intake to transfer to Access. The sum of ranks for her scores move from 14 to 22 for Probes 1 and 2 respectively.

Parental Perceptions of Self

The father's response to the questionnaire about parenting is insignificant with 1.0 probability of obtaining similar scores. As a result, it is not possible to conclude anything useful from this particular questionnaire. The mother's response to the questionnaire on parenting is also insignificant with a .361 probability of obtaining similar scores. It is worth noting that the mother does show an increase in the sum of ranks from intake to transfer to Access from 3 to 6 respectively, but these results are inconclusive since they are not significant at the required level of probability.

Child's Perceptions of Self

The child's responses to the questionnaires on self-concept are also insignificant with a .522 probability of obtaining similar scores by chance alone.

CASE 15

Case 15 represents a two parent family in which two probes are available for the father at intake and transfer to Access and three probes are available for the mother at intake, transfer to Access and discharge.

Parental Perceptions of Behaviour

The father's responses to the two questionnaires are insignificant with a probability of .50 of obtaining similar scores as those reflected with 1 degree of freedom. As a result, it is not possible to conclude anything useful from this particular case other than a general trend appears to occur in the sum of ranks as they increase from 16.5 to 19.5 from Probe 1 to Probe 2.

The mother's responses to the questionnaire on parenting were significant on this particular questionnaire at the .001 level of probability with 2

degrees of freedom. Basically the mother's sum of ranks demonstrated an increase from 13 to 29 to 30 at Probes 1, 2 and 3 respectively. As a result she concurred with the father's initial assessment of the child's behaviour as improving over time, although the apparent improvement in the child's behaviour was only slight after transfer to Access.

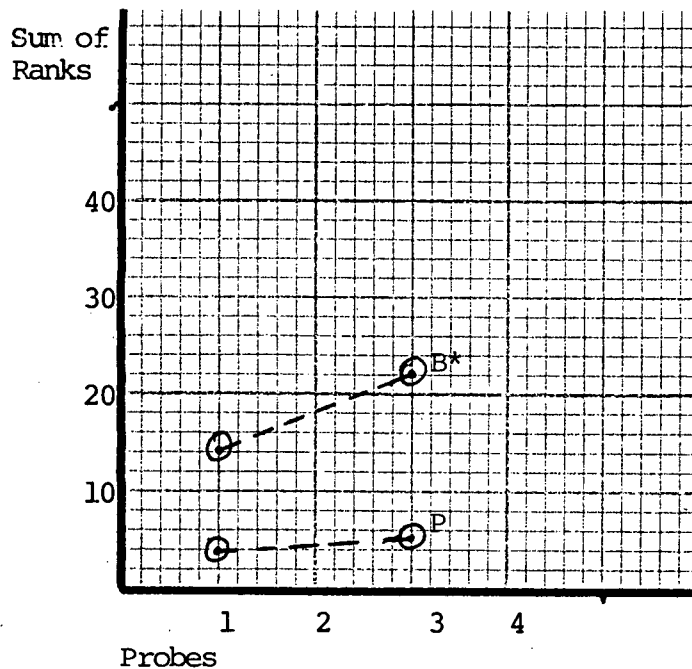
Parental Perceptions of Self

In this particular case the father's responses to the questions about parenting were insignificant with a probability of .50 and 1 degree of freedom. The sum of ranks indicated a slight increase from Probe 1 to Probe 2, however this increase could have occurred from chance alone.

The results for the mother's responses to the questionnaire on parenting were insignificant as well, with a .361 probability that similar results could be obtained by chance alone. It is worth noting a trend that appears in the data but which is unreliable, since the data are not significant. This trend reflects an increase in the mother's positive parenting responses between intake and transfer to Access followed by a subsequent decrease at the discharge probe.

Child's Perceptions of Self

The sum of ranks for the child's responses to the questionnaire on his self-concept were again insignificant with a probability of .522 that such results could have occurred by chance alone. It is interesting to note the child's sum of ranks increase from 8.5 to 12 at transfer to Access and decrease to 9.5 on discharge. The pattern is quite similar to the pattern observed in the mother's data relating to parenting. However, again this observation is not reliable since the data are not judged to be significant.

CASE 16

Case 16 involves a single parent mother on which two probes are available for analysis. The mother completed Probe 1 at intake and Probe 3 at discharge from the program. Unfortunately, the second probe, the transfer to Access probe, was unavailable for analysis.

Parental Perceptions of Behaviour

This particular mother reflected an increase in her sum of ranks scores from 14.0 to 22.0 from Probes 1 to 3. These results were significant at the .02 level of probability with 1 degree of freedom. Unfortunately the results are extremely tentative, since the middle probe is unavailable for analysis. However, the results of the probes represent an increase in the child's positive behaviours according to the mother between her initial assessment of the child at intake and her final assessment of the child as he was discharged from the Children's Foundation.

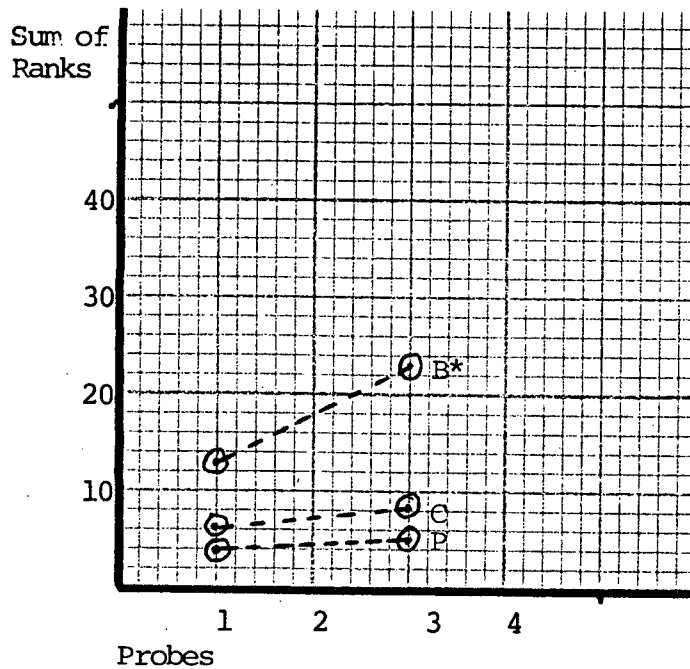
Parental Perceptions of Self

The mother completed questionnaire 2, the questionnaire on parenting, however the results were insignificant in this particular case. She showed an increase in sum of ranks from 4 to 5 from Probes 1 to 3, but these results are so tentative as to be unreliable in interpreting the data.

Child's Perceptions of Self

Unfortunately in this particular case, the child did not complete the second probe with a result that no data was available for comparison between the initial probe at intake and the final probe at discharge.

Unfortunately this case provided only two valid series of questionnaires available for analysis, both of which must be interpreted very cautiously since the second probe at transfer to Access is unavailable.

CASE 17

This case represents a single parent mother on which two probes are available at intake and at discharge. Once again in this particular case, the transfer to Access probe is unavailable for analysis.

Parental Perceptions of Behaviour

In this case, the mother demonstrated an improvement in her sum of ranks from 13 to 23 from Probes 1 to 3 respectively. These results were significant at the .01 level of probability with 1 degree of freedom. As a result, it is possible to conclude that this parent reported an apparent change in her child's behaviour which is significant. Again, because of the missing probe in the centre these results must be interpreted cautiously.

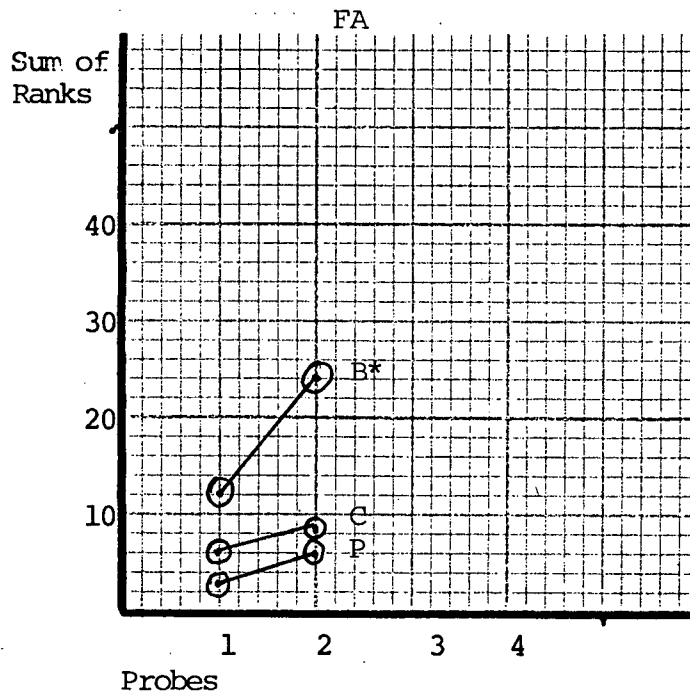
Parental Perceptions of Self

The results from this questionnaire were insignificant, although the mother did demonstrate an increase in her sum of ranks from 4 to 5 from Probes 1 to 3 respectively.

Child's Perceptions of Self

The results for this particular child's questionnaire are insignificant although he demonstrated an increase in the sum of ranks from 6.5 to 8.5 for Probes 1 to 3 respectively. Once again the results must be interpreted very tentatively since they are significant to start with, and a probe is missing in the transfer to Access stage of this child's treatment program.

Generally, this case represents an increase in the positive behaviour as well as very slight increases in the child's self-concept and the mother's concept of her parenting role. However, all of these increases must be interpreted very cautiously since both the child's self-concept and the mother's parenting scales resulted in insignificant statistical results and the questionnaire on behaviour, although it was statistically significant, leaves a number of questions in view of the missing data between the first and third probes.

CASE 18

Case 18 represents the case of a single parent father on which two probes are available.

Parental Perceptions of Behaviour

The father in responding to this questionnaire reported an increase in the positive behaviour of his child which is significant at the .001 level of probability with 1 degree of freedom. The sum of ranks increased from 12 to 24 from Probes 1 to 2, which represented a significant increase in the number of positive behaviours that this father observed his child presenting during the time that the child was resident at Children's Foundation.

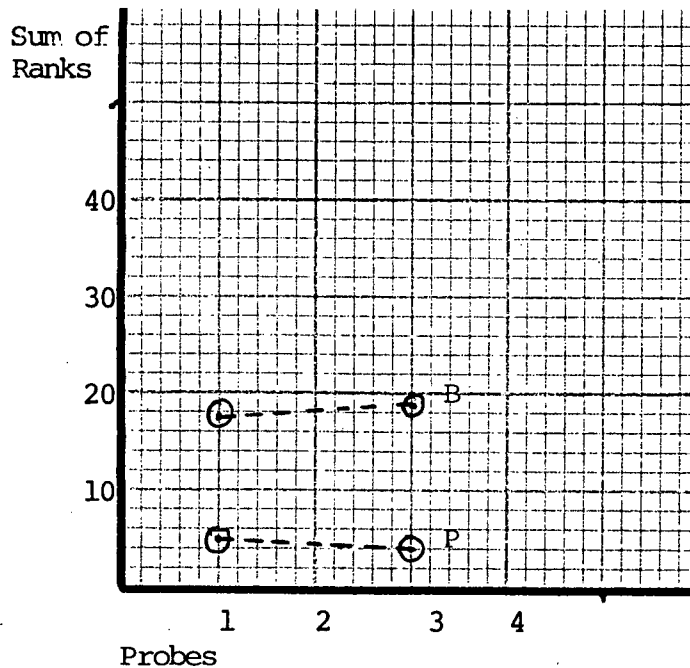
Parental Perceptions of Self

The results to this questionnaire were insignificant with a probability of obtaining similar results of .500 probability. The father did increase the sum of ranks from 3 to 6 for this particular questionnaire which seems to reflect an increase in his positive feelings about his role as a parent. However, since the results are insignificant it is not possible to reach any definitive conclusions as to the meaning of these results.

Child's Perceptions of Self

The child's response to the third questionnaire at Probes 1 and 2 again were insignificant. Although the child increased the sum of ranks from 6.5 to 8.5 for these two probes respectively, these results were statistically insignificant.

It is worth observing that in this particular case all three facets of the family demonstrated improvement from Probes 1 to 2, despite the fact that the child's self-concept and the parent's parenting estimations were insignificant changes over these two probes. This appears to represent an important trend in this particular family.

CASE 19

This particular case represents a two parent family in which probes were available only for the mother at two points in time. Unfortunately, the probe completed at transfer to Access was not available for either parent, however, the mother did complete the probe at discharge. Since the parent is not available at discharge, this case is analyzed in this research project as a single parent family, since it would appear that the father was no longer available for contact with the agency.

Parental Perceptions of Behaviour

The results of the mother's responses to Questionnaire 1 were insignificant although she did increase the sum of ranks from 17.5 to 18.5 for Probes 1 and 3 respectively. As indicated, this can quite easily occur by chance alone. As a result, this researcher cannot conclude that any significant change occurred in this particular family between the time that the family

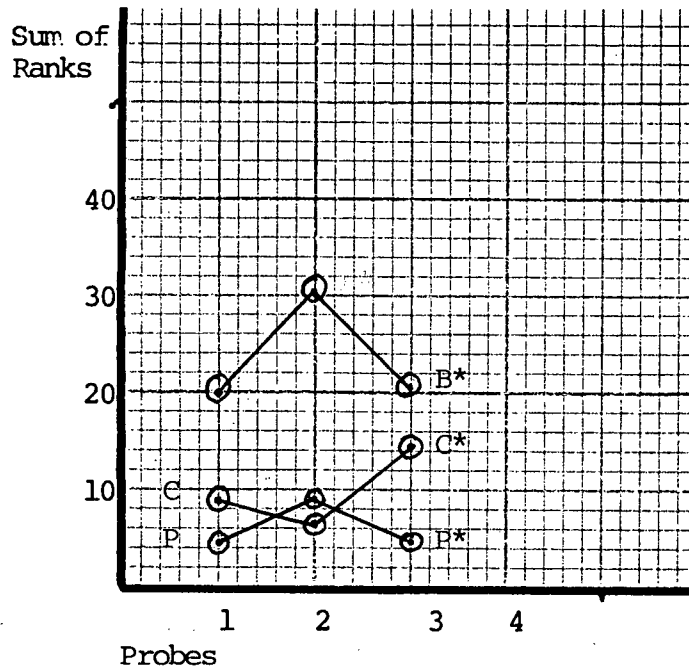
was first seen at intake and the time that the family was seen or completed the questionnaire at discharge. Again, this researcher cautions the reader in that the results of Probe 2 are missing so any trends in the data are extremely tentative, especially since the difference in the sum of ranks between the two probes is insignificant.

Parental Perceptions of Self

Once again, the father failed to complete Questionnaire 2, however, the mother completed Questionnaire 2 for Probes 1 and 3. The sum of ranks decreased from Probe 1 to Probe 3 from 5 to 4 respectively. Once again, these results were insignificant.

Child's Perceptions of Self

The child failed to complete any questionnaires beyond Questionnaire 1 in this particular case. Consequently, there are no data available on the child and his particular feelings about himself in this family.

CASE 20

This case involves a single parent mother in which three probes are available at intake, transfer to Access and discharge.

Parental Perceptions of Behaviour

The sum of ranks for this particular mother increases from 20.0 at Probe 1 to 30.5 at Probe 2 and to 21.5 at Probe 3. These results are significant at the .10 level of probability, with 2 degrees of freedom. In reviewing the trend in this particular case, it is worth noting that the mother's assessment of her child's behaviour improves at the transfer to Access point, but drops off again to a point slightly above the child's behaviour when he first was seen at Children's Foundation at intake. As a result, the degree of improvement in this particular family appears to be slight, since the child's behaviour has regressed by the time the discharge probe is completed to a point not far above his original behaviour.

Parental Perceptions of Self

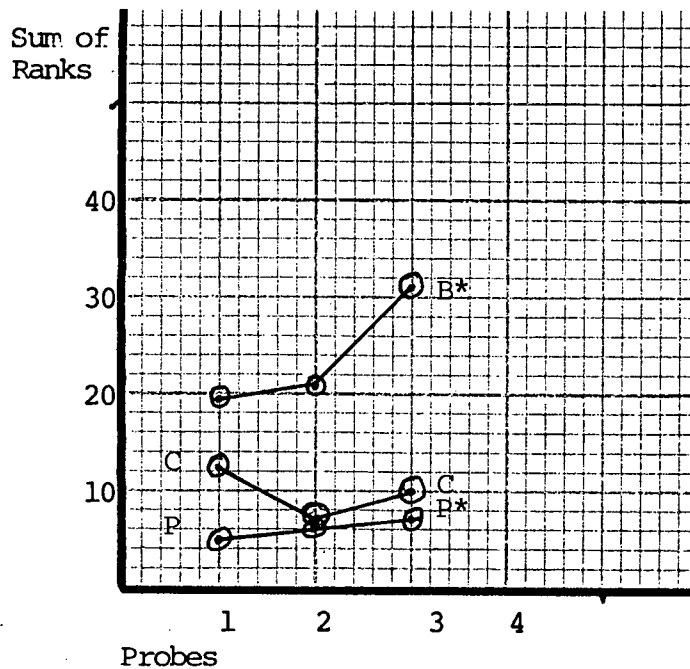
The parent's response to the questions on parenting were significant at the .194 level of probability in this particular case. The sum of ranks however, varied from 4.5 to 9 to 4.5 at Probes 1, 2 and 3 respectively. As a result, the overall trend in this particular family appears to indicate that the mother's positive feelings about her role as a parent have returned to the same level after treatment is discontinued as they were when the mother first approached the Children's Foundation. This is particularly problematic since these results are as close to being significant as any results yet obtained.

Child's Perceptions of Self

In this particular case the child's assessment of his self-concept is significant at the .039 level of probability. It is interesting that in this particular case the sum of ranks varies from 9.0 to 6.5 to 14.5 for Probes 1, 2 and 3 respectively.

This case raises a number of questions for this researcher. Both the mother's assessment of her own parenting skills and the child's positive behaviour vary in a similar relationship increasing at Probe 2, decreasing at Probe 3. However, the child's behaviour shows an inverse relationship to these two factors. He starts with a higher selfesteem rating, drops at transfer to Access and establishes a still higher level of self esteem and self confidence at the time of discharge. This is contrary to the mother's self esteem and her assessment of this particular child's behaviour which is declining. As a result it appears that this particular family is still encountering difficulties in dealing with the behaviour of this child and that the child apparently has gained further strength in

his self esteem at the cost of the parent's self esteem and ability to control or elicit positive behaviour from this particular child.

CASE 21

Case 21 represents a single parent mother on whom three probes are available at intake, transfer to Access and discharge.

Parental Perceptions of Behaviour

The results of Questionnaire 1 are significant at the .05 level of probability with 2 degrees of freedom. In this particular case the mother demonstrates an increase in the sum of ranks from 19.5 to 21.5 to 31.0 for Probes 1, 2 and 3 respectively. It is interesting in this particular case that the mother assesses her child's behaviour as improving most drastically when the child is in fact living at home and having contact through the Children's Foundation Access program only.

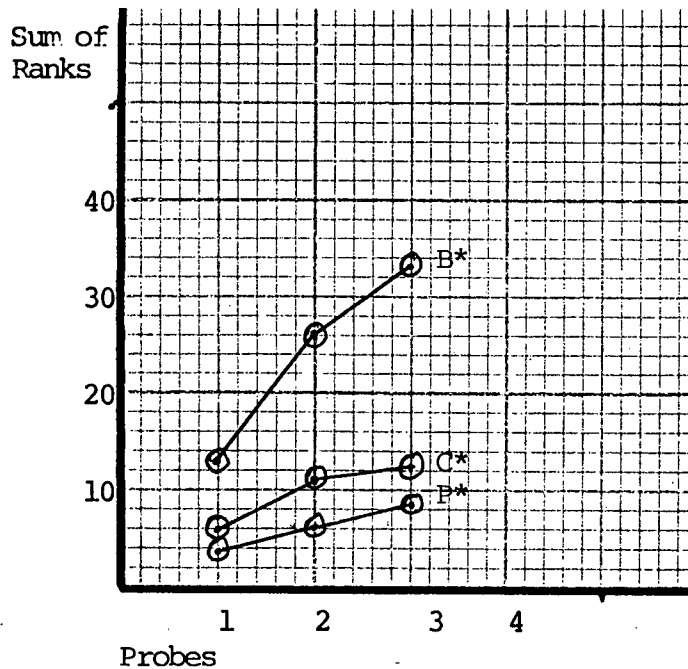
Parental Perceptions of Self

This particular parent's responses to the questions on parenting were significant at the .194 level of probability. The sum of ranks increased from 5 to 6 to 7 over the three probes reflecting a constant improvement in this particular parent's feelings about parenting.

Child's Perceptions of Self

The child's responses to the questionnaire regarding his own self-concept were insignificant with a probability of .367 of obtaining similar results by chance alone. In general a trend is observed from a high of 12.5 for the sum of ranks at Probe 1 to 7.5 at Probe 2 and 10.0 at Probe 3. In this particular case, the child's self esteem seems to have declined over the time that he was resident at Children's Foundation and began to improve once he was discharged and the family was being seen through the Access program only.

In this particular family the trends are also interesting. The mother reports an increasing improvement in her child's behaviour across the three probes coupled with an increase in her own sense of her abilities as a parent. The child, on the other hand, reflects a drastic decrease in his own self confidence from the time he is admitted to the Children's Foundation to the time he is transferred to Access. Once he is on the Access program, his self esteem seems to improve again.

CASE 22

This case reflects the results of a single parent mother on whom probes are available at intake, transfer to Access and discharge.

Parental Perceptions of Behaviour

The results for Questionnaire 1 are significant at the .001 level of probability with 2 degrees of freedom. In this particular case, the sum of ranks show a constant increase from 13.0 to 26.0 to 33.0 at Probes 1, 2 and 3 respectively. As a result, this parent reports an improvement in her child's behaviour during the time that her child has contact with the Children's Foundation.

Parental Perceptions of Self

The results of Questionnaire 2 are insignificant. The results are below the .194 level of probability which indicates that these results could

have been obtained by chance alone. In looking at the graphing of the parent's responses to these questionnaires, it is possible, however, to observe an upward trend in the sum of ranks across the three probes. This would tend to indicate that this particular parent is demonstrating an improved sense of self confidence in her parenting role. However, since the results are statistically insignificant any conclusions that may be drawn from this particular trend are very tentative.

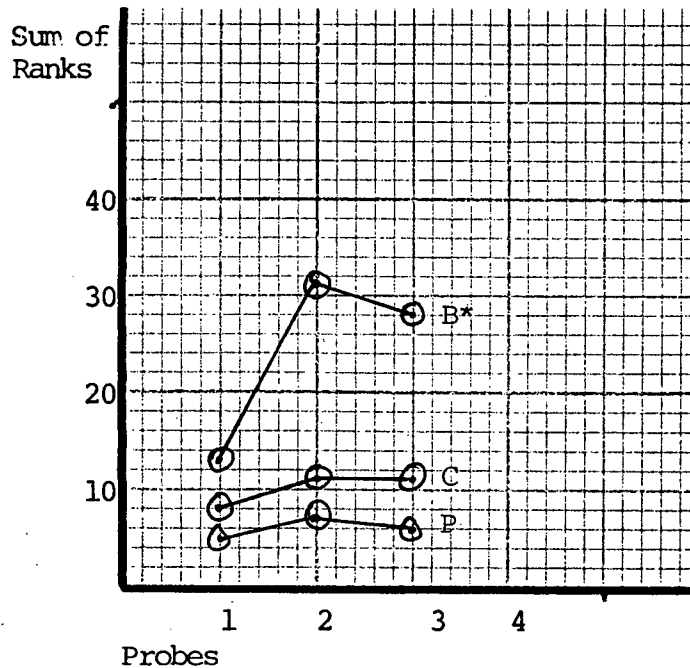
Child's Perceptions of Self

The results of this child's responses to the questionnaires on his self-concept are significant at the .124 level of probability. As a result, this child has demonstrated a statistically significant improvement in his self-concept over the three probes. The results increase from 6.0 to 11.5 to 12.5 for Probes 1, 2 and 3. It is therefore possible to conclude that this particular child has demonstrated an improvement in his concept of self esteem during the time that he has had contact with the Children's Foundation. While the most rapid increase in the sum of ranks occurs during the time that the child is in residence, this trend is continued into the Access program Phase.

This particular case demonstrates an apparent relationship between the trends in each of the three questionnaires on each probe. Generally, from Probes 1 through 3 the behaviour of the child, the feelings of the parent about parenting and the child's feelings about himself all improve throughout the duration of this family's contact with the Children's Foundation. The most significant increase in two of these trends appears to be during the time in which the family is in direct contact with the Children's Foundation through the residence of the child at Cottage 2.

CASE 23

MO



Case 23 represents a two parent family in which probes are available for only one parent at intake, transfer to Access and discharge. The probes for the father in this particular case are unavailable beyond the initial intake probe.

Parental Perceptions of Behaviour

The mother's responses to this particular questionnaire (Questionnaire 1) were significant at the .001 level of probability with 2 degrees of freedom. The sum of ranks increased from 13.0 to 31.0 to 28.0 at Probes 1, 2 and 3 respectively. As a result, this mother reflected an improved behaviour in her child through the time that she was involved with the Children's Foundation. It is significant to note that in this particular case the child's improved behaviour appears to have dropped off somewhat after he was placed on the Access program and discharged from the Children's Foundation.

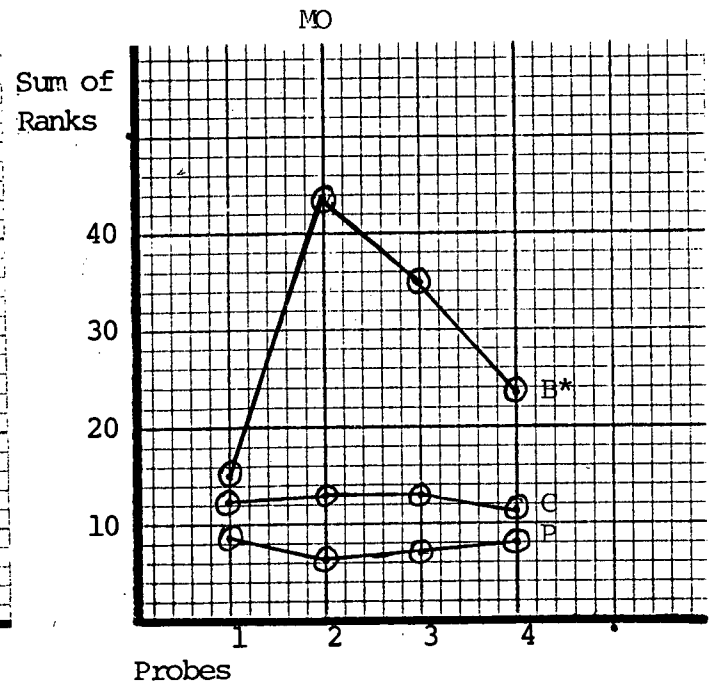
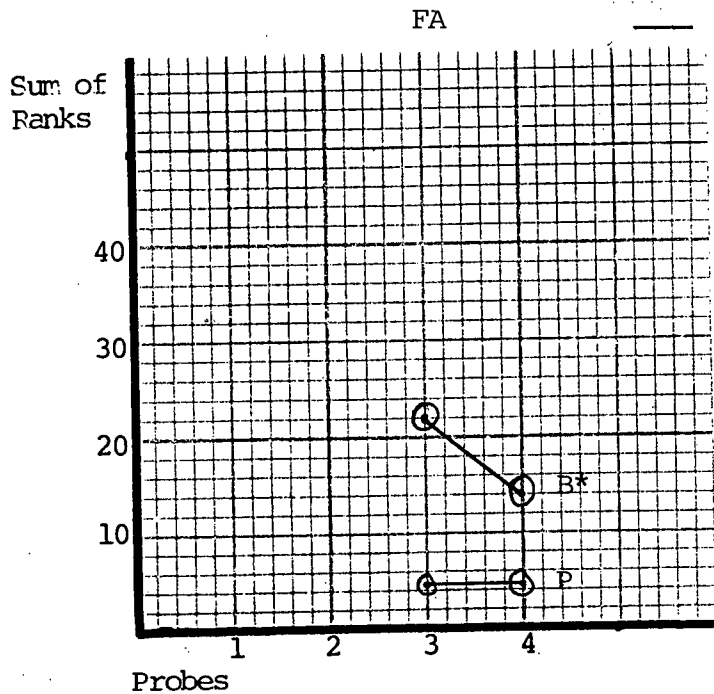
Parental Perceptions of Self

The parent's responses to these questionnaires regarding her feelings on parenting were insignificant across the three probes. However, the sum of ranks did indicate an apparent trend as the sum of ranks increased from 5 to 7 and down to 6 for Probes 1, 2 and 3 respectively. The probability of obtaining similar results is .944 for this particular case.

Child's Perceptions of Self

In this particular case the results were insignificant with a probability of .691 of obtaining similar results by chance alone. However, the child did demonstrate an apparent improvement in his self behaviour from a low of 8.0 to 11.0 for the second and third probes. Again, this trend is at best shaky since the results obtained from the statistical analysis indicates that the difference in the sum of ranks is insignificant and could have occurred equally by chance as by any other factor.

In general this case demonstrates some trends towards improvement between Probes 1 and 2 with a slight decline from Probes 3 to 4. However, these trends are at best shaky since the parenting and child's self-concept scales produced insignificant statistical results. It is worth, however, commenting on the apparent trends in the data which appear to indicate similar trends in to those observed in the reported behaviour of the parent.

CASE 24

Case 24 represents a two parent family in which probes are available on the father figure for the discharge and follow-up periods and four probes are available for the mother through intake to follow-up.

Parental Perceptions of Behaviour

The father's responses on Questionnaire 1 are significant at the .02 level of probability with 1 degree of freedom. However, the significance of these results is questionable since the father was only available at the discharge from the program and at the follow-up stage of this family. Probes are not available for him at either intake or transfer to Access stages. In addition, it is worth noting that in the father's estimation the child's behaviour deteriorates at follow-up from the discharge stage.

The probes available for the mother indicate a trend towards improvement between the initial and transfer to Access probes and a serious deterioration after the transfer to Access occurs. These results were significant at the .01 level of probability with 3 degrees of freedom.

The trend in this particular case showed an increase for the sum of ranks from 15.0 to 43.5 to 35.0 to 23.5 for Probes 1, 2, 3 and 4 respectively. It is worth noting that despite the apparent rapid decline once the child is transferred to Access that the level of behaviour apparently has improved from the initial intake level since the mother has not rated the child's behaviour as problematic as it initially was at intake.

Parental Perceptions of Self

In this particular case the father's responses to the questions on parenting are insignificant with a probability of 1 of obtaining similar results since the results are 4.5 for both probes.

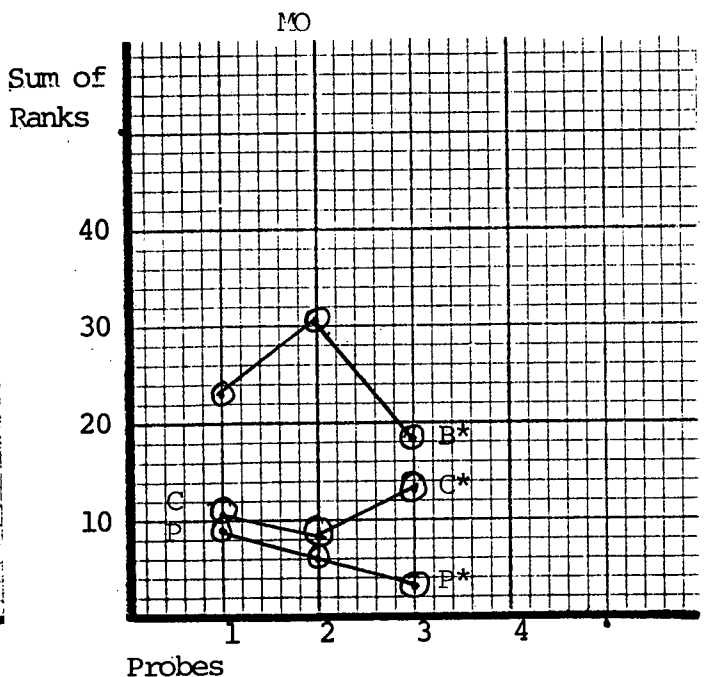
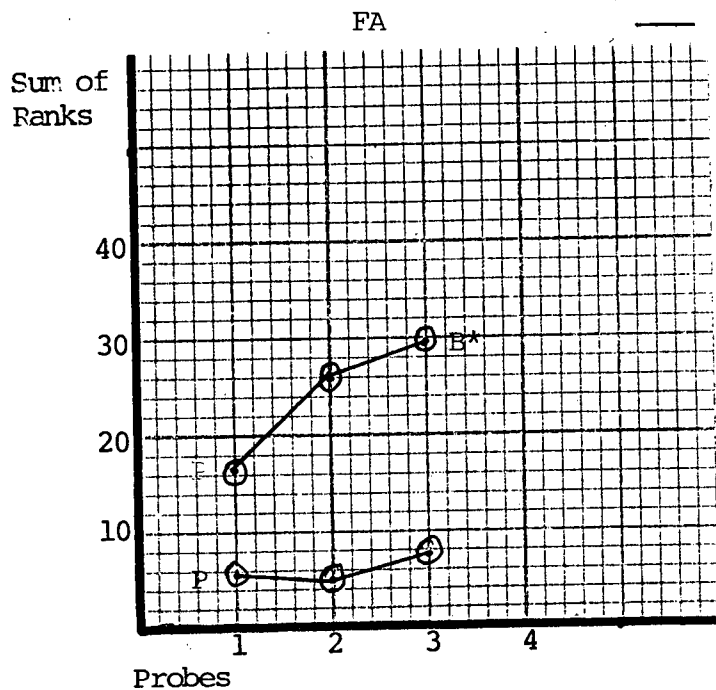
The mother's responses over the four probes available are also insignificant with a probability of .944 of obtaining similar results through chance alone. As a result, the results obtained from the mother's responses to the parenting questionnaire are insignificant and show a range of variation across the probes from 8.5 to 6.5 to 7 to 8 for Probes 1, 2, 3 and 4 respectively.

Child's Perceptions of Self

The child's responses to Questionnaire 3 are also insignificant in this particular case with a very small range in the sum of ranks from 12.5 to

13 to 13 to 11.5 across all four probes.

In this particular case it is worth noting that both the father and mother argue that the child's behaviour has deteriorated from the discharge phase of the program through to the six month follow-up phase. In comparing this with the child's apparent level of self esteem it is worth noting that the slight variation which occurs indicates that the child's self esteem has dropped slightly from the initial intake probe. On the other hand, the mother's parenting skills show a marginal increase across the four probes. However, these trends are insignificant since none of the data collected produced significant statistical results. Consequently, the trends can only be hinted at since it is impossible to establish that these trends in fact reflect changes in the family and are not merely reflecting chance variations in the data.

CASE 25

Case 25 represents a two parent family in which probes are available for the intake, transfer to Access and discharge phases of the treatment program.

Parental Perceptions of Behaviour

The father's responses to the questions on behaviour are significant at the .05 level of probability across the three probes with 2 degrees of freedom. It is interesting to note that the father's assessment of the child's behaviour shows gradual improvement across the three time periods including improvement after the transfer to Access occurs.

The mother's responses to these questions are also significant at the .05 level of probability with 2 degrees of freedom. However, the mother's responses show initial improvement in the child's behaviour between the intake and transfer to Access probes and a significant decrease in the child's

acceptable behaviour once the child is transferred to Access. This trend is inconsistent with the apparent trend in the father's assessment of this child's behaviour.

Parental Perceptions of Self

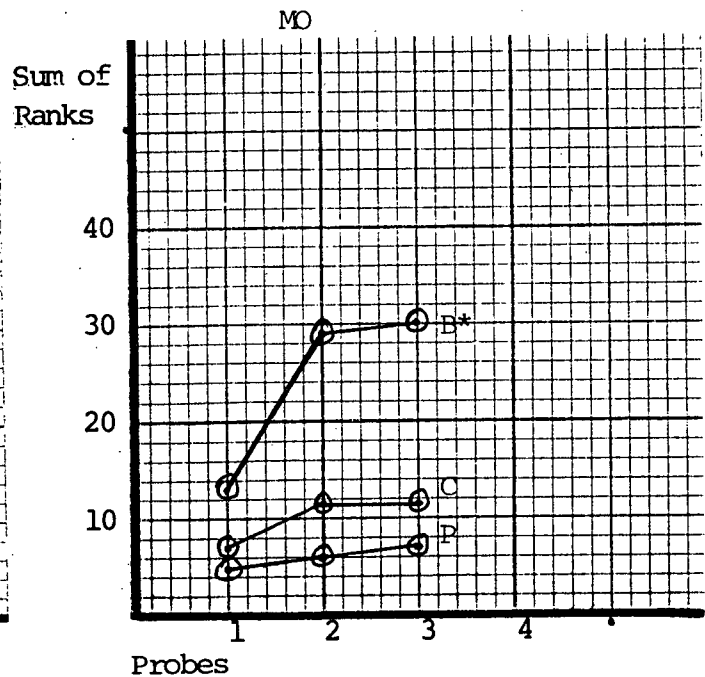
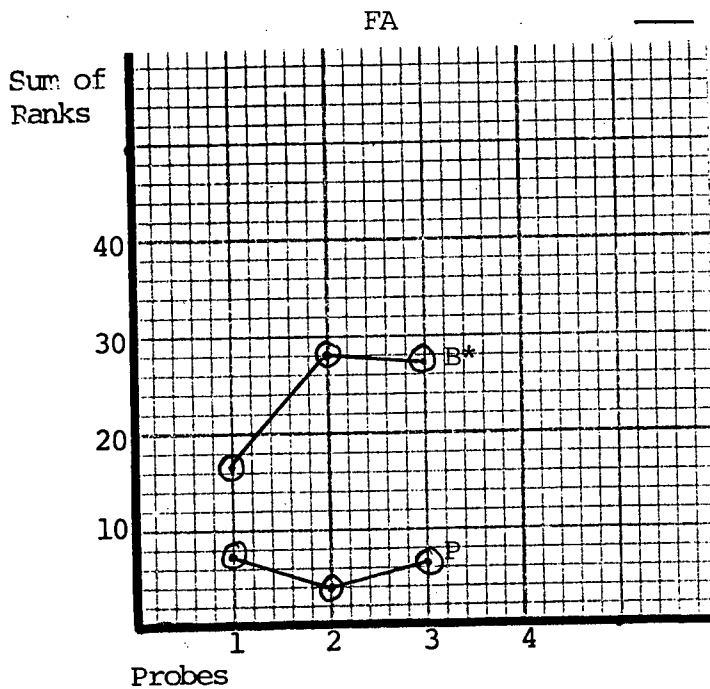
The father's responses to the parenting questions are insignificant in this particular case with a probability of .944 of obtaining similar results through chance alone. However, in noting just the general trend that appears to be reflected on the graphed data, it is possible to see that the sum of ranks increases from Probe 2 to Probe 3 which might reflect an actual improvement in this father's feelings about parenting and his attitudes towards children. Again, this trend cannot be deemed to be significant since the statistical analysis does not demonstrate that the change in behaviour is significant.

The mother's responses to the questionnaire on parenting are significant at the .028 level of probability. However, the significance in this particular case lies in that the sum of ranks declines steadily from Probe 1 to Probe 3, beginning at 9, moving to 6, decreasing to 3 for Probes 1, 2 and 3 respectively. As a result, this particular mother demonstrates a decline in her feelings about parenting and her effectiveness in parenting. This is, in fact, a significant trend in this particular parent. It is also of interest that the trend in this parent is opposite to the apparent trend in her partner which shows a trend towards improvement of his feelings about parenting.

Child's Perceptions of Self

The child's responses to this particular questionnaire are significant at the .00077 level of probability. It is worth noting that the child's responses begin at 10.5 for the sum of ranks, decrease to 8.5 and increase to 13.0 across the three probes. As a result, the child demonstrates an apparent improvement in his feelings about himself.

In summary this case is particularly problematic since the father's sense of parenting and his assessment of the child's behaviour improve over time and the mother's sense of the child's behaviour and her sense of her parenting abilities decline over time. These two trends are offset by a significant increase in the child's feelings about himself and his self esteem. Consequently, the data obtained from this family are particularly problematic in interpreting what is happening with this particular family.

CASE 26

Case 26 is a two parent family in which three probes are available for each parent at intake, transfer to Access and discharge.

Parental Perceptions of Behaviour

The father's responses to the questions on behaviour are significant at the .001 level of probability with 2 degrees of freedom. It is also worth noting that in this particular case the father's responses regarding the child's behaviour demonstrate significant improvement over time as the sum of ranks increases from 16.5 to 28.0 to 27.5 across Probes 1, 2 and 3. In addition, it is worth noting that in this particular case the father's assessment of his child's behaviour after transfer to Access is that the behaviour remains essentially stable and certainly less problematic than was the case prior to admission to the Children's Foundation.

In the case of the mother in this particular family her responses on the behaviour of the child are also significant at the .001 level of probability with 2 degrees of freedom. Again, the trend in the data demonstrates an improvement in the child's behaviour across the three probes with the sum of ranks increasing from 13 to 29 to 30 for Probes, 1, 2 and 3 respectively. As a result, this mother's view of her child's behaviour indicates that his behaviour has improved over time and maintained itself after transfer to Access.

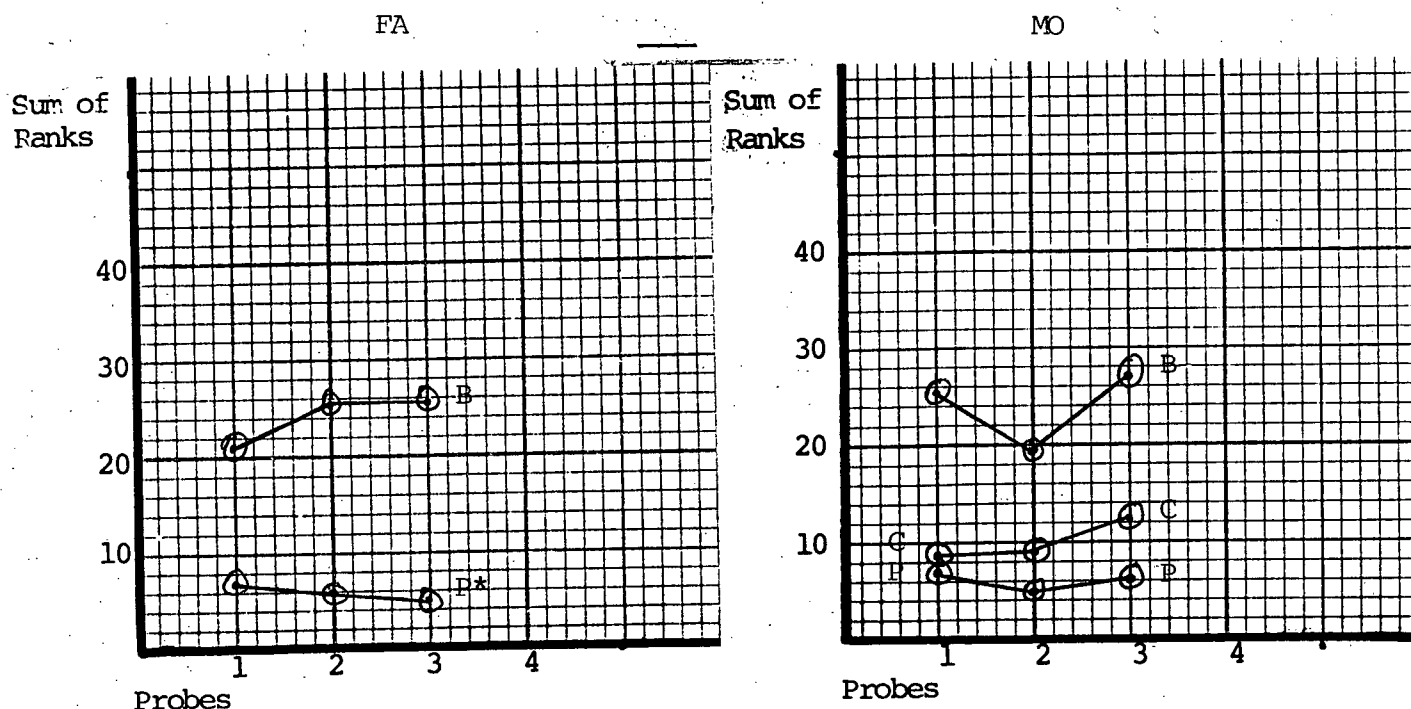
Parental Perceptions of Self

In this case, the father's responses to the questions on parenting were insignificant with a probability of .528 of obtaining similar results by chance alone. In viewing the data visually it appears that the father's sense of his ability as a parent dips from Probes 1 to 2 and increases from Probes 2 to 3 to almost attain the same level at Probe 3 as it was at Probe 1.

The mother's responses to the parenting questionnaire are also insignificant with a probability of .944 of obtaining similar results through chance alone. However, in the case of the mother's responses to the parenting questionnaire her responses show a gradual increase as the sum of ranks increases from 5 to 6 to 7 for Probes 1, 2 and 3 respectively. Visually the trend seems to be towards this parent's sense of her parenting abilities improving, however caution must be observed in relying on this trend since the statistical analysis demonstrates that a similar trend could be obtained quite likely by chance.

Child's Perceptions of Self

The child's responses to this particular questionnaire are insignificant with a .367 probability of obtaining similar results by chance alone. However, in examining the data it is possible to observe that this child's sum of ranks increases from 7 to 11.5 for Probes 2 and 3 which seems to indicate a trend towards generally improved self esteem. However, caution must also be used in examining this trend since the statistical results are again insignificant. In general this family provides a number of trends which are basically congruent. In the case of the father and mother's assessment of behaviour the behaviour of the child shows a marked improvement between intake and transfer to Access. The behaviour maintains itself basically at the same level after the transfer to Access, despite a slight decline in the father's assessment of behaviour and a slight increase in the mother's assessment of the child's behaviour. The parenting skills when compared provide two different trends. In the case of the father, his sense of his parenting skills reflects a decline from Probe 1 to Probe 2 with a slight recovery from Probe 2 to Probe 3. The mother, on the other hand, shows a trend towards generalized improvement across all three probes. Again, caution must be exercised in interpreting these trends in the parenting skills of these two parents since the statistical analysis shows that the data is not significant. In general the child's assessment of his own self esteem shows an improvement across the sum of ranks which is more or less congruent with the trends in his apparent behaviour. In this family it appears that the behaviour of the child and his improved self esteem seem to go hand in hand.

CASE 27

Case 27 represents a two parent family in which three probes are available at intake, transfer to Access and discharge.

Parental Perceptions of Behaviour

The father's responses to the questions regarding behaviour produced insignificant statistical results with a probability of obtaining similar results of .50 with 2 degrees of freedom. Despite the fact that the data appears to show a trend towards improvement in the father's assessment of his child's behaviour, these results are insignificant statistically. The sum of ranks does increase from 21.0 to 25.5 for Probes 2 and 3 but again this trend must be considered with extreme caution since the statistical analysis shows that the changes could have occurred by chance alone.

The mother's responses to the questions on the child's behaviour are also insignificant with a probability of obtaining similar results of .30 with 2 degrees of freedom. Once again, the apparent trend towards improvement after transfer to Access in this particular case must be considered carefully since the results are statistically insignificant. The sum of ranks decreases from Probe 1 to Probe 2, 25.5 to 19.5, and increases to Probe 3, 27.0. However, this variation in the mother's responses to the questionnaire is insignificant and cannot be relied upon to provide any insight into how this particular family assesses the child's behaviour.

Parental Perceptions of Self

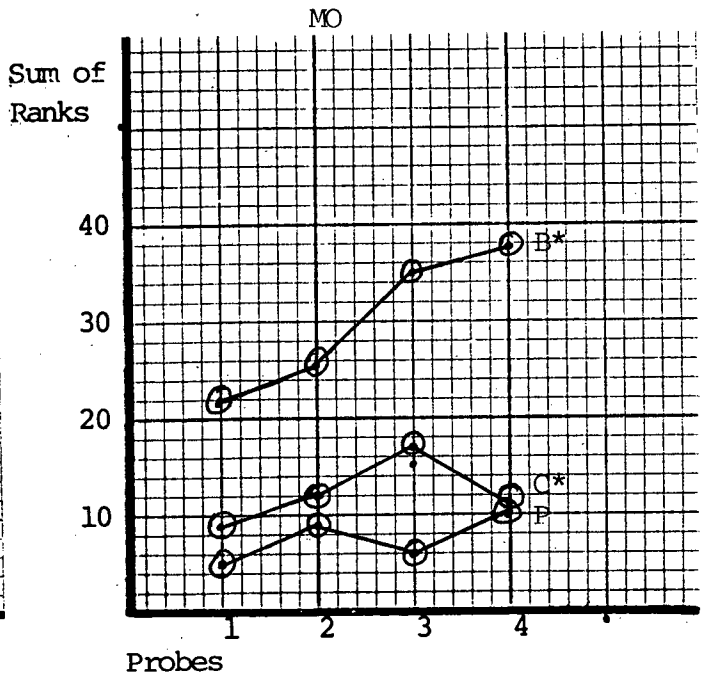
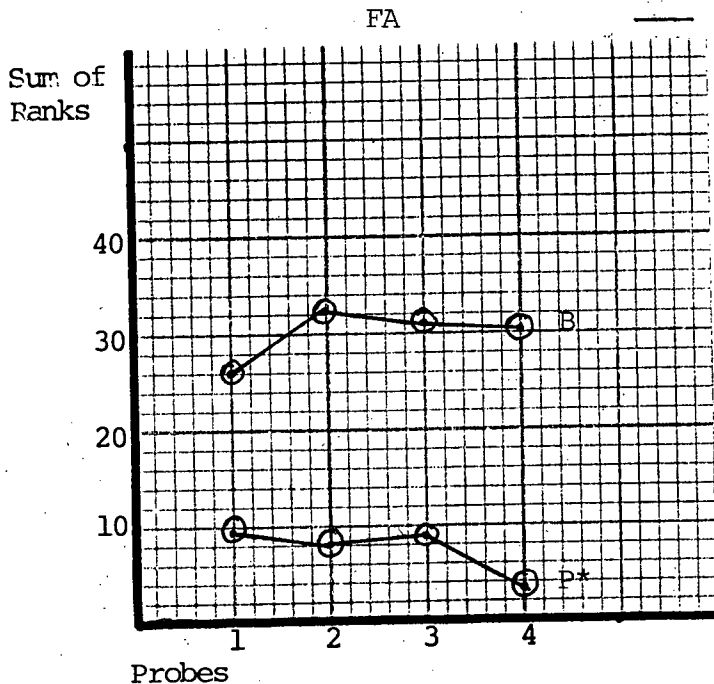
In this particular case the father's responses to the questions on parenting are significant at the .01 level of probability. However, it is important to note that the data reflects a trend in the father's responses to the parenting questionnaire which decreases from Probe 1 through to Probe 3. As a result, it appears that this particular father's sense of his parenting skills are declining over time as he has contact with the Children's Foundation.

The mother's responses to Questionnaire 2 are insignificant with a probability of .944 of obtaining similar results through chance alone. It is worth noting that the mother's responses to the parenting questionnaire also decline from intake to transfer to Access but begin to increase after the transfer to Access point. Once again, these trends are very tentative since the data is statistically insignificant.

Child's Perceptions of Self

The child's responses to the questions regarding his own self esteem were

insignificant in this particular case with a probability of obtaining similar results of .522 through chance alone. It is worth noting that despite this the child's sense of self esteem seems to increase across time as the sum of ranks increases from 8.5 to 9.0 to 12.5 for Probes 1, 2 and 3 respectively. Again, this trend must be regarded cautiously since the statistical results are insignificant.

CASE 28

Case 28 represents a two parent family in which four probes are available at intake, transfer to Access, discharge and follow-up. This is, in fact, one of the few cases available at Children's Foundation in which probes were available across all four time sequences.

Parental Perceptions of Behaviour

In this particular case the father's responses to the questions regarding the child's behaviour were insignificant with a probability of obtaining similar results of .70 with 3 degrees of freedom. Unfortunately, the variation in the sum of ranks is so slight as to prohibit the establishing of a significant pattern of variation. The sum of ranks begins with 26, moves to 32.5 to 31.0 to 30.5 across Probes 1, 2, 3 and 4. Despite this apparent trend towards improvement and then deterioration after transfer to Access, the trend cannot be assumed to be valid since the statistical

analysis demonstrates that these variations could have occurred by chance alone. Consequently, it might be reasonable to assume that in this case the father has observed no change in behaviour across time since the fluctuations in the data may be solely due to chance.

The mother's responses to this particular questionnaire, however, were significant at the .05 level of probability with 3 degrees of freedom. In examining the mother's data it is possible to observe a continually improving trend in her assessment of the child's behaviour from intake to follow-up. The sum of ranks increases from 22 to 25.5 to 35.0 to 37.5, across Probes 1, 2, 3 and 4. Thus, in this parent's assessment her child has made significant improvement in the way he behaves since contact with the Children's Foundation began.

Parental Perceptions of Self

The father's responses to the questionnaire on parenting produced significant results at a probability of .194 of obtaining similar results by chance alone. However, in examining the data visually what is significant is this particular father's feelings about parenting and his attitudes towards children show a marked decline across time. The sum of ranks starts at 9.5, moves to 8 to 9 to 3.5 across Probes 1, 2, 3 and 4 respectively. Consequently this parent's attitudes and feelings about parenting appear to decline over time. What is more important is that this decline is significant enough both statistically and clinically to question what is happening with this particular parent.

The mother's responses to the parenting questionnaire produced results that were insignificant with a probability of .361 of obtaining similar

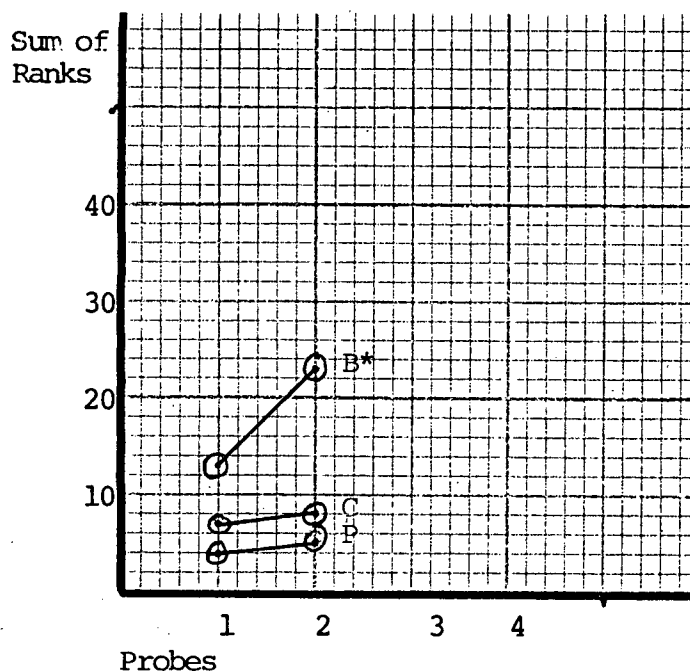
results through chance alone. In visually examining the data from the mother's responses it appears to indicate that a gradual upward trend is occurring between the sum of ranks from Probe 1 and Probe 4. However, this trend has to be regarded very cautiously since once again the data are not statistically significant.

Child's Perceptions of Self

The child's responses to the questions on his relationship with various areas of his own life produced results which were significant at the .039 level of probability. Interestingly enough, the child showed continual improvement through Probes 1, 2 and 3 during which he had contact with Children's Foundation. However, when the follow-up probe was returned the child showed a decrease in his self esteem. However, this apparent decrease in the child's self esteem still maintained itself at a level higher than that prior to intake. The only question that remains in this particular family with this child is whether or not his self esteem will continue to plummet resulting in it ending up at the same level prior to intake in another few months.

In examining this family generally it is worth noting that the data provides somewhat confusing trends. Generally, the behaviour of the child as reported by both parents seems to improve over time although the father's data is not statistically significant. In parenting skills the only significant trend appears to be the downward one for the father's sense of his own parenting abilities while the mother's data appears to indicate a gradual improvement in her sense of her parenting strengths. On the other hand, the child's sense of self appears to rise through the first

three probes until he is left with no further contact with Children's Foundation, at which point it begins to drop again. Again, this particular family raises more questions than it answers with the data that is collected through the evaluation project.

CASE 29

This particular case represents a single parent family. Only probes 1 and 2 are available for analysis on this case.

Parental Perceptions of Behaviour

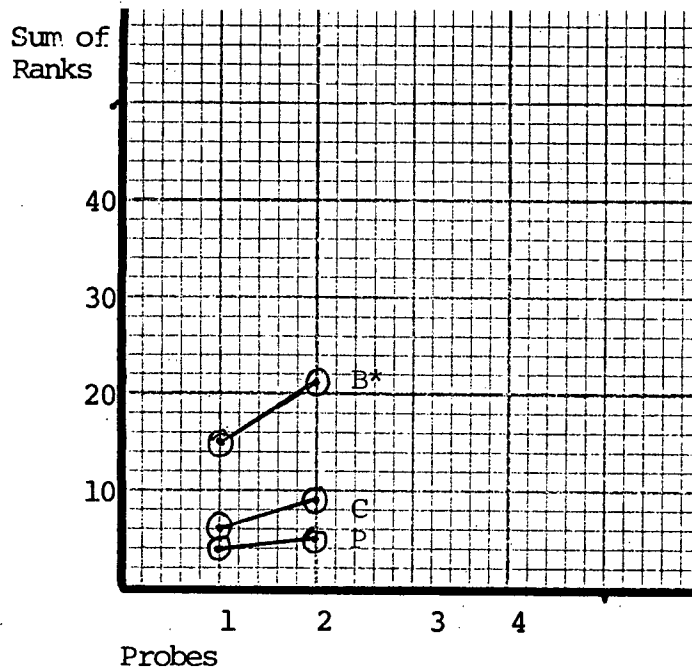
The results obtained on Questionnaire 1 were significant at the .01 level of significance with 1 degree of freedom. The sum of ranks increased over time from 13 to 23 from Probes 1 to 2 respectively. As a result, the child's behaviour in the parent's assessment improved significantly between the time that the child was first seen at intake and the time that the child was discharged or transferred to Access. The remaining two probes were unavailable for this case.

Parental Perceptions of Self

The results for Questionnaire 2 on the parent's attitudes and feelings about parenting were insignificant, although the sum of ranks indicated an increase from 4 to 5 for Probes 1 and 2. The results obtained on this case could have been obtained through chance alone with a probability of 1.

Child's Perceptions of Self

The results for Questionnaire 3 in this particular case were also insignificant although the sum of ranks demonstrated an increase from 7 to 8 for Probes 1 and 2 respectively. Any conclusions that this researcher draws from these particular results can only be conjecture since there is a distinct lack of data available for this case. However, the data does appear to demonstrate a trend in the behaviour of the child which appeared to be improving between Probes 1 and 2 according to the mother's report.

CASE 30

Case 30 represents the data from a single parent mother with two probes, Probes 1 and 2 available for analysis.

Parental Perceptions of Behaviour

The results for Questionnaire 1 were significant at the .10 level of probability with 1 degree of freedom. The sum of ranks increased from 15 to 21 for Probes 1 and 2 respectively, demonstrating a significant improvement in this child's behaviour according to this mother's report. As a result, it is possible to conclude that this particular child seems to be demonstrating improved behaviour between intake and transfer to the Access program.

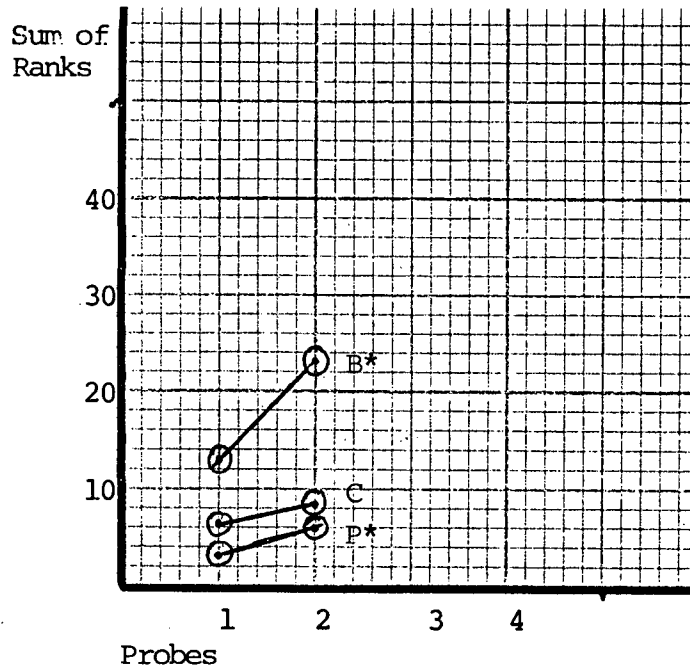
Parental Perceptions of Self

The data for Questionnaire 2 are insignificant with a probability of

obtaining the same results as observed of 1. The sum of ranks for this questionnaire increased from 4 to 5 for Probes 1 and 2 respectively, but this increase is insignificant statistically so it is not possible to state whether or not this parent's feelings and attitudes towards parenting are improving significantly or not.

Child's Perceptions of Self

The results for Questionnaire 3 are also insignificant with a probability of obtaining the same results by chance alone of .522. The sum of ranks demonstrates an increase from Probe 1 to Probe 2 of 6 and 9 respectively. Unfortunately, since this data is not statistically significant it is not possible to draw any definitive conclusions from this data.

CASE 31

Case 31 represents the data from a single parent family in which two probes are available, Probes 1 and 2.

Parental Perceptions of Behaviour

The results for Questionnaire 1 are significant at the .01 level of probability with 1 degree of freedom. The sum of ranks indicates an increase from 13 to 23 from Probes 1 to 2 respectively. As a result, this mother is reporting a significant improvement in her child's behaviour between the initial intake and the transfer to Access parts of the Children's Foundation program. Again, the significance of this improvement is somewhat tenuous since there is only limited data available on how this child is doing on the Access program or after discharge. However, the improvement that the mother is reporting as a result of the child's involvement in the program at Cottage 3 is statistically significant and represents a significant improvement in this child's behaviour.

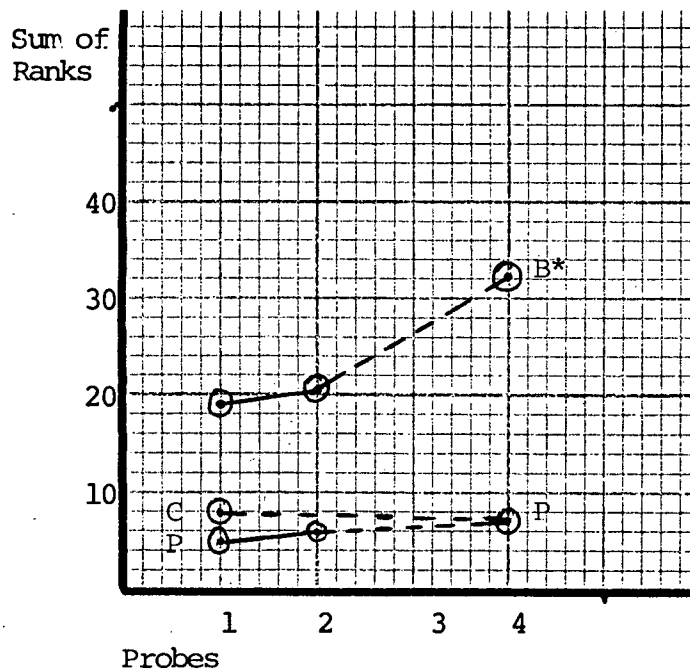
Parental Perceptions of Self

The results for Questionnaire 2 are significant at the .028 level of significance. The sum of ranks increases from 3 to 6 for Probes 1 and 2 respectively and this represents a significant improvement in this parent's feelings and attitudes towards parenting. As a result, it is possible to conclude that between the initial probe and the transfer to Access probe during which Children's Foundation has been working with this parent, this parent has improved her sense of her parenting skills.

Child's Perceptions of Self

The results for Questionnaire 3 are insignificant with a probability of obtaining similar results of .954. As a result, the increase in the sum of ranks from 6.5 to 8.5 from Probes 1 and 2 does not represent a significant improvement in this particular child's self-concept.

Overall this particular case appears to demonstrate a significant improvement in both the parent's feelings about her parenting and her observations of the child's behaviour. It is possible as a result of this significant data to state that this parent appears to be coping more adequately with her own role as a parent and is thereby able to observe changes in the child's behaviour when he comes home from the Children's Foundation.

CASE 32

Case 32 represents a single parent family in which three probes are available for analysis. The probes that are available for this particular case include Probes 1, 2 and 4 with Probe 3 missing.

Parental Perceptions of Behaviour

The results for Questionnaire 1 are significant at the .01 level of probability with 2 degrees of freedom. The sum of ranks increases from 19.0 to 20.5 to 32.5 across the first, second and fourth probes, and this increase represents a significant change in this child's behaviour. However, the significance of the final follow-up probe is somewhat limited by the fact that Probe 3 is missing. While 32.5 represents an increased score over Probe 2 it may in fact represent a significant decrease from the behaviour that the mother observed during the time that the child was living at home and the family was still having weekly contact with the

family counsellor. As a result, the graph which represents the apparent improving trend in this child's behaviour between Probes 2 and 4 must be analyzed with caution. The results are in fact extrapolated between Probes 2 and 4 and an assumption is made that the data demonstrates a straight line relationship indicating continual improvement from the time that the child is transferred to Access to the time that the follow-up probe is completed.

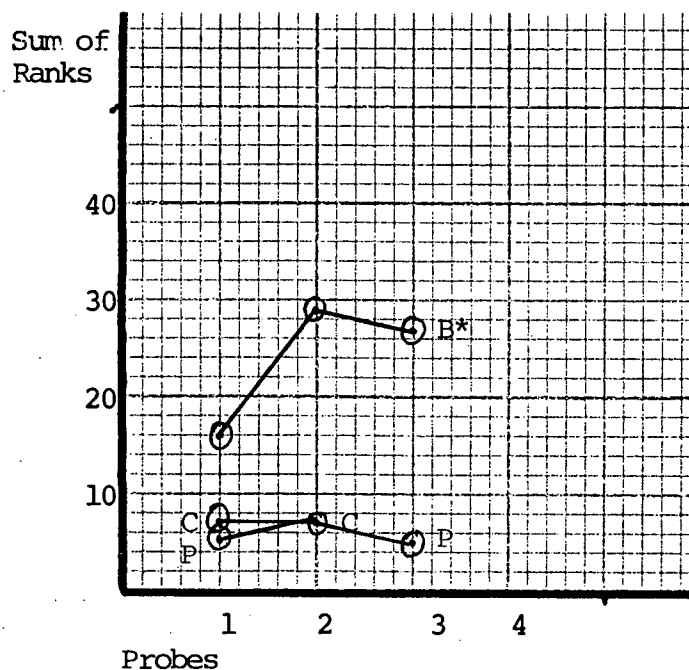
Parental Perceptions of Self

The results for Questionnaire 2 are insignificant with the probability of obtaining similar scores by chance alone of .944. As a result, the apparent trend in the sum of ranks to increase from 5 to 6 to 7 for Probes 1, 2 and 4 respectively is insignificant. It is not possible to determine whether this parent's behaviour is in fact improving around her attitudes and feelings about parenting.

Child's Perceptions of Self

Questionnaire 3 resulted in even less data in this particular case since the child refused to complete Probe 2. The results were insignificant on this particular questionnaire and the sum of ranks demonstrated a decrease from Probe 1 to Probe 2 from 8 to 7 respectively. As a result, these results are even more tenuous since it is not possible to determine what the child felt about himself during the time that he was actually in residence at Children's Foundation and during the time that he was actually living at home and seeing a family counsellor at Children's Foundation.

The results from this particular questionnaire are more problematic than most others, since the amount of missing data creates problems for the interpretation of the results. Particularly difficult is the child's response to Probe 2, in that this particular child refused to complete Probe 2 which appears to be a confusing trend since the mother is reporting an ever increasingly better behaviour from the child through Probes 1, 2 and 4 respectively.

CASE 33

Case 33 represents a single parent family in which three probes, Probes 1, 2 and 3, are available.

Parental Perceptions of Behaviour

The results for the first questionnaire relating to the behaviour of the child were significant at a probability of .02 with 2 degrees of freedom. The sum of ranks increased from 16 to 29 and decreased slightly to 27 at Probes 1, 2 and 3 respectively. As a result, it is possible to state that the results obtained in this questionnaire are significant since the child has demonstrated improved behaviour between the time he was seen at intake and the time he was discharged from the Foundation.

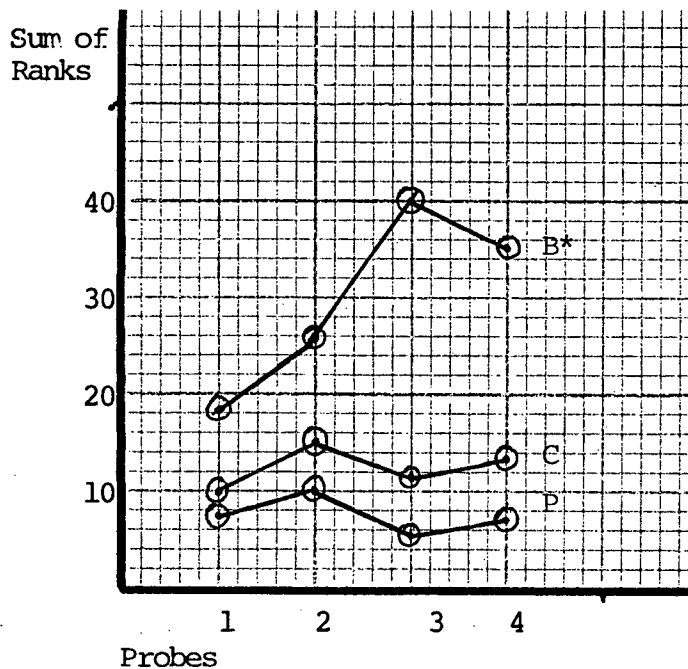
Parental Perceptions of Self

The results from this questionnaire were insignificant with the sum of ranks fluctuating from 5.5 to 7 to 5.5 for Probes 1, 2 and 3 respectively. The probability of obtaining similar results by chance alone were .954. Consequently the information obtained from this particular parent is not significant, despite an apparent improvement in her attitudes about parenting during the time that she was involved in the Children's Foundation and her child was resident at the Foundation.

Child's Perceptions of Self

The results for Questionnaire 3 were insignificant with the probability of obtaining similar results of 1. In fact, the sum of ranks for this particular questionnaire were the same at Probes 1 and 2, 7.5 and Probe 3 was not available for analysis. As a result no useful data can be collected from this particular questionnaire.

In observing the trends in this case, it is possible to observe that in fact the parent and child's behaviours as reported by the parent appear to improve between Probes 1 and 2 and slightly decline from Probe 2 and 3. However, this trend or correlation is at best speculative since the parent's results on the parenting scale were insignificant.

CASE 34

This case represents a single parent mother in which four probes are available through intake to follow-up.

Parental Perceptions of Behaviour

The results of this particular questionnaire (1) were significant at the .05 level of probability with 3 degrees of freedom. In fact, the sum of ranks increased from 18.5 to 26 to 40 and decreased to 35.5 for Probes 1, 2, 3 and 4 respectively. It is interesting that during the time that the child was resident at the Foundation and the mother and child were seeing the family counsellor during the Access program, that the child's behaviour continues to improve according to this mother. However, once the child was discharged his behaviour apparently deteriorated.

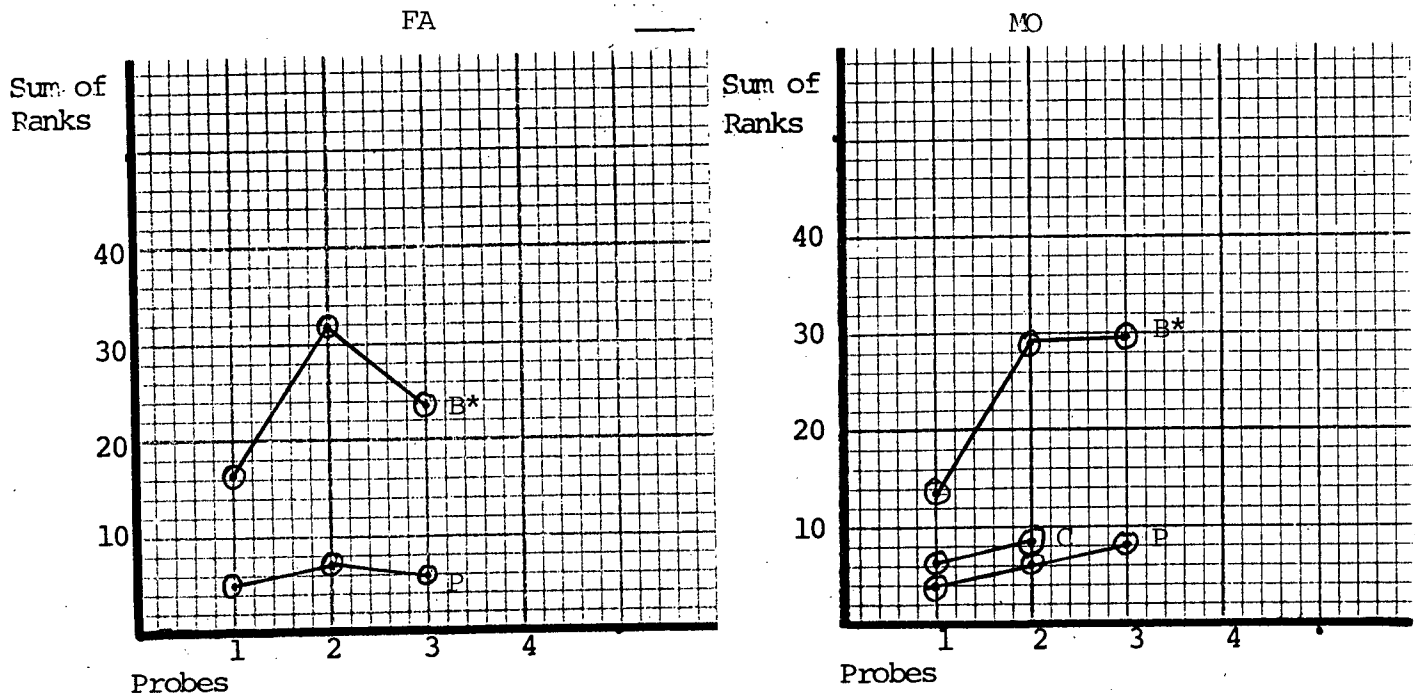
Parental Perceptions of Self

The results for Questionnaire 2 were insignificant with a probability of obtaining similar results by chance of .528. The parent's results demonstrated some fluctuation as the sum of ranks varied for each of the probes from 7.5 to 10 to 5.5 to 7 for Probes 1, 2, 3 and 4 respectively. However, this variation could have occurred equally by chance and therefore is not significant.

Child's Perceptions of Self

The results for Questionnaire 3 were insignificant with a probability of obtaining similar results through chance alone of .522. The sum of ranks however, demonstrated interesting fluctuations between 10, 15, 11.5 and 13.5 for Probes 1, 2, 3 and 4 respectively. However, the significance of this variation cannot be determined since the results of the probes are statistically insignificant.

It is interesting to note that in this particular case the parent's assessment of the child improves across three probes while the parent's assessment of her own attitudes and feelings about parenting and the child's self assessment increase and decrease across the same three probes. Finally, it is worth noting that once the child is discharged and returned home, both the parent's responses to the parenting questionnaire and the child's responses seem to increase while the reported behaviour of the child from the parent decreased. However, these trends are highly speculative since the results obtained in this questionnaire were significant only for the behaviour reported by the parent. The trends for the other two data were insignificant.

CASE 35

Case 35 represents the results for a two parent family in which three probes are available for each parent across probes 1, 2 and 3.

Parental Perceptions of Behaviour

In Questionnaire 1 the father's results were significant at the .01 level of probability with 12 degrees of freedom. In reviewing the data, however, the trends are somewhat confusing since the sum of ranks increases from 16.5 to 32 and drops back drastically to 23.5 for Probes 1, 2 and 3 respectively. As a result in reviewing the chart it is possible to see that this father's assessment of the child's behaviour represents a significant decline once the child is returned home and the family is transferred to the Access program.

The mother's results for this particular family were also significant at the .001 level of probability with 2 degrees of freedom. The sum of ranks increases steadily across the three probes from 13.5 to 29 to 29.5 for Probes 1, 2 and 3 respectively. In this parent's assessment, thus, the child's behaviour appears to show a continuous improvement across time although admittedly the last improvement is slight compared to the improvement reported between Probes 1 and 2.

Parental Perceptions of Self

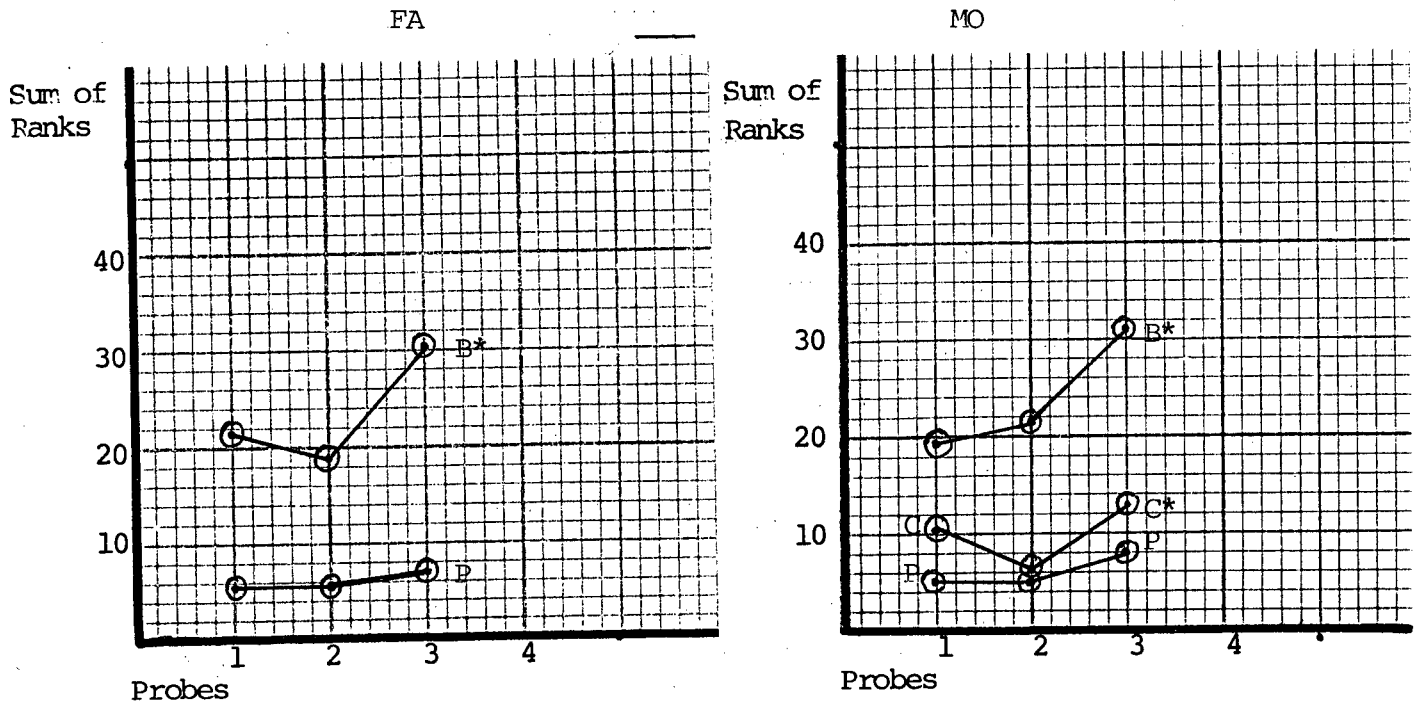
The results for Questionnaire 2 were insignificant with the probability of obtaining similar results through chance alone of .944. The fluctuation in the sum of ranks from 5 to 7 to 6 across Probes 1, 2 and 3 respectively can occur equally by chance alone as by any other factor working in this family.

The mother's responses to this questionnaire were also insignificant with a probability of obtaining similar results of .361. Despite the fact that this is insignificant it is worth noting an apparently more dramatic trend in the responses of this mother to the questions on parenting since the sum of ranks steadily increases across the three probes from 4 to 6 to 8 for Probes 1, 2 and 3 respectively. Thus, despite the statistical insignificance it does appear that this particular mother is demonstrating a gradual improvement in her feelings and attitudes towards parenting across time.

Child's Perceptions of Self

The results of Questionnaire 3 are insignificant although the sum of ranks

demonstrates an increase from 6.5 to 8.5 for Probes 1 and 2 respectively. However, the probability of obtaining similar results through chance alone is .954. As a result no conclusive evidence can be drawn from this particular statistical test. What is worth noting in this case is that this child refused or failed to return the final questionnaire at discharge which raises questions about this particular child and the results obtained.

CASE 36

Case 36 represents a two parent family in which three probes are available for each parent at Probes 1, 2 and 3.

Parental Perceptions of Behaviour

The father's responses to Questionnaire 1 were insignificant with a probability of obtaining similar results through chance alone of .30 with 2 degrees of freedom. The sum of ranks, however, did demonstrate a gradual upward movement from 21.5 to 19.5 to 30.5 across Probes 1, 2 and 3 respectively. As a result, despite the apparent decrease in this child's behaviour over Probes 1 and 2, his behaviour does seem to improve once he is discharged from the Foundation. This, of course, raises serious questions as to how this child was doing during the time that he was resident in Children's Foundation and only being seen by his parents on the weekend.

The mother's responses to this particular questionnaire were significant at the .05 level of probability with 2 degrees of freedom. The sum of ranks gradually increased across time from 19.5 to 21.5 to 31 for Probes 1, 2 and 3 respectively. Apparently, this particular child, according to his mother, continued to show improved behaviour the longer that the family remained in contact with the Children's Foundation.

Parental Perceptions of Self

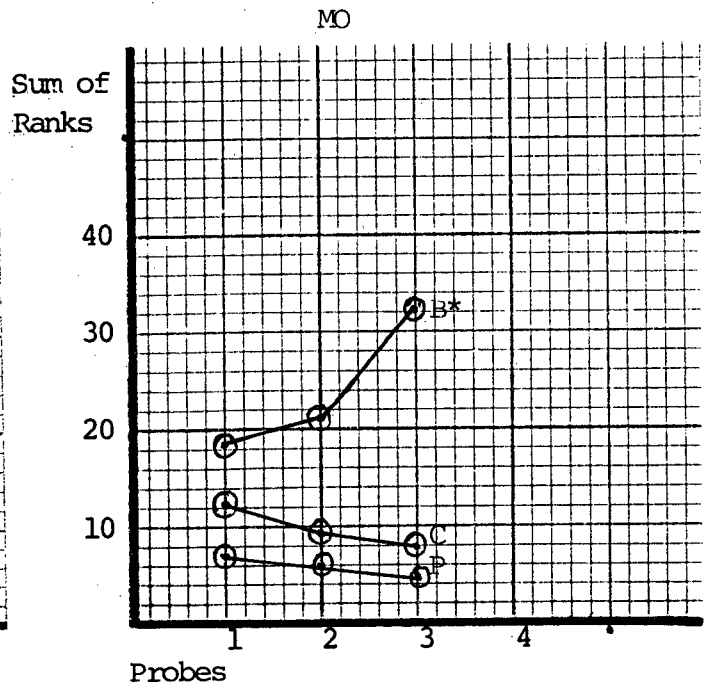
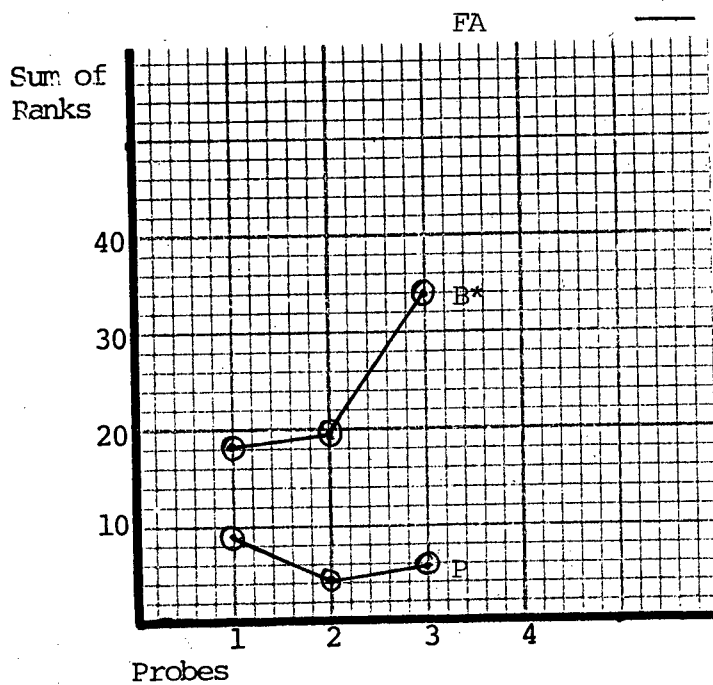
The results for the father's responses to Questionnaire 2 were insignificant with a probability of obtaining similar results through chance alone of .944. The sum of ranks did not increase between Probes 1 and 2 but remained set at 5.5 while the sum of ranks increased to 7 at Probe 3. This variation is significant.

The mother's responses to the parenting questionnaire were also insignificant with a probability of obtaining similar results of .528. Again, Probes 1 and 2 remained the same with the mother scoring 5 in each of these two probes and increasing her score to 8 at Probe 3. Since the results are statistically insignificant the change between Probes 2 and 3 cannot be interpreted. It is possible, however, in view of both parents' responses to this questionnaire, to speculate that their feelings about parenting improved once they had the child back in their own home.

Child's Perceptions of Self

The child's responses to Questionnaire 3 were insignificant with a probability of obtaining similar results of .124. The sum of ranks increased across time from Probes 1 to 3 with a decrease in the sum of ranks at Probe 2.

The sum of ranks for these probes were 10.5, 6.5 and 13 for Probes 1, 2 and 3 respectively. As a result it is possible to state that in this case the child's feelings about himself apparently also improved once he was discharged from the Foundation and went home. Overall this case raises a number of interesting issues since the child's self-concept, the parents' sense of parenting and the most significant improvements in behaviour occurred after this child was discharged from the Children's Foundation, rather than during the time that the child was actually a resident at the Foundation. It is interesting to speculate how these parents might have felt about their dealings with the Foundation or their feelings about failing with their child and having to involve an outside agency in working through their problems. Since this researcher knows nothing more about this particular family it is only possible to speculate what these trends might mean, however in comparing these trends with the actual casework material it might provide more insight into what was happening in this particular family.

CASE 37

This particular case represents a two parent family in which probes are available at intake, transfer to Access and discharge.

Parental Perceptions of Behaviour

The results for the father's responses to Questionnaire 1 are significant at the .01 level of probability with 2 degrees of freedom. The sum of ranks increases from 18.5 to 19.5 to 34 for Probes 1, 2 and 3 respectively. As a result, the father reports a significant improvement in his child's behaviour across time.

The mother's results are also significant at the .01 level of probability with 2 degrees of freedom. Again, the sum of ranks increases from 18.5 to 21 to 32.5 for Probes 1, 2 and 3 respectively. As a result, this mother reports a significant improvement in her child's behaviour across time.

Overall in this particular case it is worth noting that the most rapid change in this child's behaviour occurs after the child is discharged from Children's Foundation but on the Access program. Both parents report significant increases in the acceptable behaviour of the child once he is living at home and they are receiving continuing support through the Access program.

Parental Perceptions of Self

The father's results on Questionnaire 2 were significant at the .028 level of probability. However, what appears important in this particular case is that the sum of ranks decreases across time from 9 to 4.5 to 5.5 from Probes 1, 2 and 3 respectively. As a result, this parent's feelings about parenting appear to decrease significantly the longer he has contact with the Children's Foundation. This trend, of course, must be offset with the apparent improvement in his child's behaviour which he reports on Questionnaire 1.

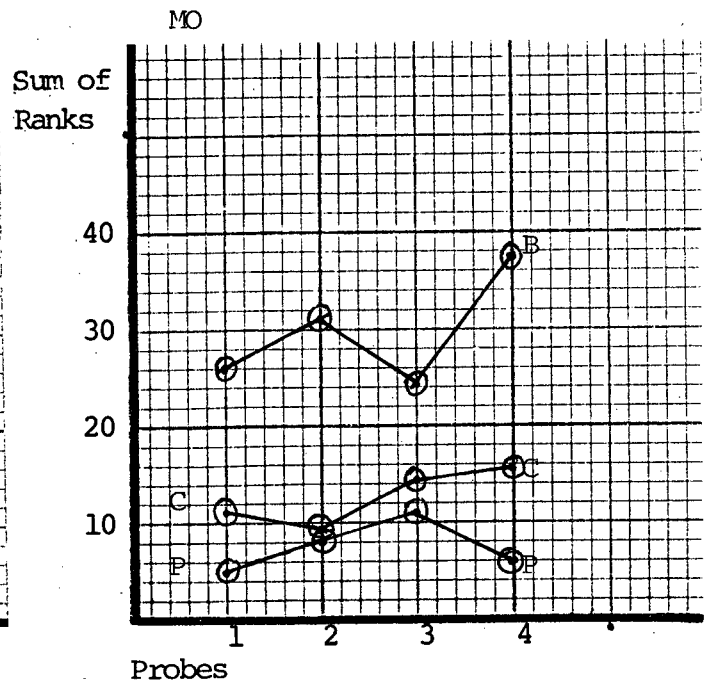
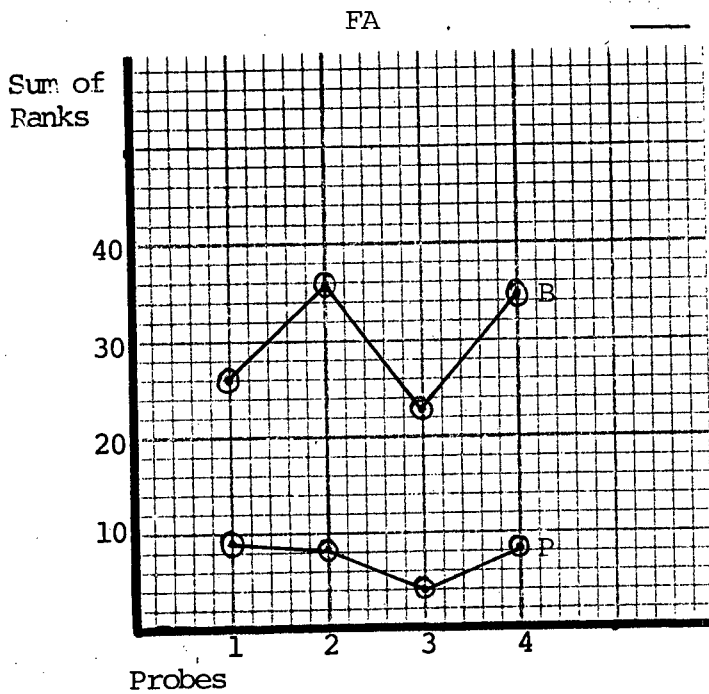
The mother's results on this questionnaire were insignificant with a probability of obtaining similar results of .944 through chance alone. In addition, it is worth noting that this mother reports a decline in her positive feelings about parenting from Probe 1 to Probe 3 as the sum of ranks decreases from 7 to 6 to 5 for Probes 1, 2 and 3 respectively. Although this trend is insignificant statistically it is still worth noting the trend since it coincides with a similar trend in the reported feelings of the father of this particular child.

Child's Perceptions of Self

The results of Questionnaire 3 were insignificant with a probability of

obtaining similar results by chance alone of .367. The sum of ranks also declined across time from 12.5 to 9.5 to 8.0 at Probes 1, 2 and 3 respectively. Once again, this trend must be interpreted cautiously since the statistical analysis indicates that this material or trend is insignificant.

Overall this case provides some interesting information regarding the parents' feelings and their assessment of their child's behaviour. It is worth noting that the child's behaviour appears to improve most dramatically after the transfer to Access occurs. In addition, the father's responses on the parenting questionnaire begin to improve at this same point in time, leading one to speculate that this apparent improvement in behaviour may again relate to the feelings of the parents at having their child home. When compared with the case record data at the Children's Foundation these trends may be more significant than is apparent through the simple analysis of the data provided in this research project.

CASE 38

Case 38 represents a two parent family in which four probes are available for each parent at intake, transfer to Access, discharge and follow-up.

Parental Perceptions of Behaviour

The father's responses to Questionnaire 1 are insignificant with a probability of obtaining similar results of .50 with 3 degrees of freedom. The sum of ranks demonstrates little variation across time beginning at 26, increasing to 35.5, decreasing to 23.0 and increasing to 34.5 at Probes 1, 2, 3 and 4 respectively. Consequently, this father's report on his child's behaviour can occur equally by chance and the fluctuations in the data demonstrate this chance occurrence of the data. It is worth noting however, that at follow-up the father does appear to report an improvement in his child's behaviour over the initial intake process. As a

result this apparent variation in the data results still appears to have a gradual trend towards increasing the more positive behaviour across time.

The mother's results of this particular questionnaire are also insignificant with the probability of obtaining similar results of .60 with 3 degrees of freedom. Once again, this parent shows a similar variation in her responses to the questions on behaviour with the sum of ranks varying from 26.0 to 31.0 to 24.5 to 37.5 for Probes 1, 2, 3 and 4 respectively. As a result no significant trend occurs in this data.

Both these parents appear to be responding to the questionnaires on behaviour through chance alone. Although a slight upward trend appears to exist for both parents the significance of this trend is questionable since none of the statistical analyses verifies that this trend is in fact statistically significant. These variations can easily occur by chance alone and by a large percentage of chance. Consequently, although an initial examination of the chart might indicate a gradual improvement in this child's behaviour over time, the actual data analysis does not support such an observation.

Parental Perceptions of Self

The father's responses to Questionnaire 2 were insignificant with the probability of obtaining the same results through chance alone of .361. The sum of ranks varied from 9 to 8.5 to 4 to 8.5 for Probes 1, 2, 3 and 4 respectively.

The mother's results for this particular probe also were insignificant with the probability of obtaining the same scores still less than the .20 level

of probability set for significance in this case. By extrapolating it can be approximated that the mother's level of significance would be approximately .27. The sum of ranks varies from 5 to 8 to 11 to 6 across Probes 1, 2, 3 and 4 respectively.

As a result, neither parent in this case provides any significant data regarding their feelings or attitudes towards parenting. Both demonstrate a pattern of fluctuation across time and neither shows any significant improvement at the final probe. The father's sum of ranks in fact decreases .5 while the mother's increases 1. However, these increases are so marginal as to indicate how insignificant this data is.

Child's Perceptions of Self

The child's responses to this particular questionnaire (3) are also insignificant with the probability of approximately .27. The sum of ranks varies across time from 11 to 9 to 14.5 to 15.5 for Probes 1, 2, 3 and 4 respectively, however, this variation is not sufficient to indicate that any significant trend exists in this data.

In summary this particular case provides no significant data despite the fact that it is one of the few cases that the Foundation has four probes available on. Generally the trend in the behaviour shows a gradual improvement over the four probes, however, this improvement when analyzed statistically is deemed to be insignificant. The child's self-concept or his measurement of his own self-concept appears to improve over time, but this, once again, is insignificant. Finally, both parents respond to the questionnaire, one showing an increase, one showing a decrease in their feelings about parenting and the trends are both insignificant as

well. Unfortunately for one of the few cases on which follow-up data was available, no data has been obtained on this particular case that is of any value in understanding what is happening in this family. It appears that pure chance alone is working in all the responses that this family provided to these probes. As a result, it might be worthwhile reviewing the process that was used in collecting the data from this family and also comparing this data with the assessment of the clinicians involved in working with this family, as this may be the only way to obtain any useful information about this family or about how Children's Foundation was able to help or unable to help this family.

APPENDIX 12

NOTE TO READER

To protect the identity of the staff involved in the Survey of Staff Reactions and the Identity of the cases from other than agency Staff, this Section has been omitted from all copies except those provided to the Agency.

APPENDIX 13

Friedman Tables

APPENDIX

TABLE N. TABLE OF PROBABILITIES ASSOCIATED WITH VALUES AS LARGE AS OBSERVED VALUES OF χ^2 IN THE FRIEDMAN TWO-WAY ANALYSIS OF VARIANCE BY RANKS*
Table N_I. $k = 3$

N = 2		N = 3		N = 4		N = 5	
χ^2	p	χ^2	p	χ^2	p	χ^2	p
0	1.000	.000	1.000	.0	1.000	.0	1.000
1	.833	.667	.944	.5	.931	.4	.954
2	.500	.200	.528	1.5	.653	1.2	.691
3	.167	.033	.194	2.0	.431	1.6	.522
		4.667	.028	3.5	.273	2.8	.367
		6.000		4.5	.125	3.6	.182
				6.0	.069	4.8	.124
				6.5	.042	5.2	.093
				8.0	.0046	6.4	.039
						7.6	.024
						8.4	.0085
						10.0	.00077

N = 6		N = 7		N = 8		N = 9	
χ^2	p	χ^2	p	χ^2	p	χ^2	p
.00	1.000	.000	1.000	.00	1.000	.000	1.000
.33	.956	.286	.964	.25	.967	.222	.971
1.00	.740	.857	.768	.75	.794	.667	.814
1.33	.570	1.143	.620	1.00	.654	.889	.865
2.33	.430	2.000	.486	1.75	.531	1.556	.569
3.00	.252	2.571	.305	2.25	.355	2.000	.398
4.00	.184	3.429	.237	3.00	.285	2.667	.328
4.33	.142	3.714	.192	3.25	.236	2.889	.278
5.33	.072	4.571	.112	4.00	.149	3.556	.187
6.33	.052	5.429	.085	4.75	.120	4.222	.154
7.00	.029	6.000	.052	5.25	.079	4.667	.107
8.33	.012	7.143	.027	6.25	.047	5.556	.069
9.00	.0081	7.714	.021	6.75	.038	6.000	.057
9.33	.0055	8.000	.016	7.00	.030	6.222	.048
10.33	.0017	8.857	.0084	7.75	.018	6.889	.031
12.00	.00013	10.286	.0036	9.00	.0099	8.000	.019
		10.571	.0027	9.25	.0080	8.222	.016
		11.143	.0012	9.75	.0048	8.667	.010
		12.286	.00032	10.75	.0024	9.556	.0060
		14.000	.000021	12.00	.0011	10.667	.0035
				12.25	.00086	10.889	.0029
				13.00	.00026	11.556	.0013
				14.25	.000061	12.667	.00066
				16.00	.0000036	13.556	.00035
						14.000	.00020
						14.222	.000097
						14.889	.000054
						16.222	.000011
						18.000	.0000006

* Adapted from Friedman, M. 1937. The use of ranks to avoid the assumption of normality implicit in the analysis of variance. *J. Amer. Statist. Ass.*, 32, 688-689, with the kind permission of the author and the publisher.

APPENDIX

TABLE N. TABLE OF PROBABILITIES ASSOCIATED WITH VALUES AS LARGE AS OBSERVED VALUES OF χ^2 IN THE FRIEDMAN TWO-WAY ANALYSIS OF VARIANCE BY RANKS* (Continued)
Table N_{II}. $k = 4$

N = 2		N = 3		N = 4			
χ^2	p	χ^2	p	χ^2	p	χ^2	p
.0	1.000	.2	1.000	.0	1.000	5.7	.141
.6	.958	.6	.958	.3	.992	6.0	.105
1.2	.834	1.0	.910	.6	.928	6.3	.094
1.8	.792	1.8	.727	.9	.900	6.6	.077
2.4	.625	2.2	.608	1.2	.800	6.9	.068
3.0	.542	2.6	.524	1.5	.754	7.2	.054
3.6	.458	3.4	.446	1.8	.677	7.5	.052
4.2	.375	3.8	.342	2.1	.649	7.8	.036
4.8	.298	4.2	.300	2.4	.524	8.1	.033
5.4	.167	5.0	.207	2.7	.508	8.4	.019
6.0	.042	5.4	.175	3.0	.432	8.7	.014
		5.8	.148	3.3	.389	9.3	.012
		6.6	.075	3.6	.355	9.6	.0069
		7.0	.054	3.9	.324	9.9	.0062
		7.4	.033	4.5	.242	10.2	.0027
		8.2	.017	4.8	.200	10.8	.0016
		9.0	.0017	5.1	.190	11.1	.00094
				5.4	.158	12.0	.000072

* Adapted from Friedman, M. 1937. The use of ranks to avoid the assumption of normality implicit in the analysis of variance. *J. Amer. Statist. Ass.*, 32, 688-689, with the kind permission of the author and the publisher.

Chi Square Tables

TABLE 6. Distribution of χ^2

df	Probability													
	.99	.98	.95	.90	.80	.70	.50	.30	.20	.10	.05	.02	.01	.001
1	.03157	.03628	.00393	.0158	.0642	.148	.455	1.074	1.642	2.706	3.841	5.412	6.635	10.827
2	.0201	.0404	.103	.211	.446	.713	1.386	2.408	3.219	4.605	5.991	7.824	9.210	13.815
3	.115	.185	.352	.584	1.005	1.424	2.366	3.665	4.642	6.251	7.815	9.837	11.341	16.268
4	.297	.429	.711	1.964	1.649	2.195	3.357	4.878	5.989	7.779	9.488	11.668	13.277	18.465
5	.554	.752	1.145	1.610	2.343	3.000	4.351	6.064	7.289	9.236	11.070	13.388	15.086	20.517
6	.872	1.134	1.635	2.204	3.070	3.828	5.348	7.231	8.558	10.645	12.592	15.033	16.812	22.457
7	1.239	1.564	2.167	2.833	3.822	4.671	6.346	8.383	9.803	12.017	14.067	16.622	18.475	24.322
8	1.646	2.032	2.733	3.490	4.594	5.527	7.344	9.524	11.030	13.362	15.507	18.168	20.090	26.125
9	2.088	2.532	3.325	4.168	5.380	6.393	8.343	10.656	12.242	14.684	16.919	19.679	21.666	27.877
10	2.558	3.059	3.940	4.865	6.179	7.267	9.342	11.781	13.442	15.987	18.307	21.161	23.209	29.588
11	3.053	3.609	4.575	5.578	6.989	8.148	10.341	12.899	14.631	17.275	19.675	22.618	24.725	31.264
12	3.571	4.178	5.226	6.304	7.807	9.034	11.340	14.011	15.812	18.549	21.026	24.054	26.217	32.909
13	4.107	4.765	5.892	7.042	8.634	9.926	12.340	15.119	16.985	19.812	22.362	25.472	27.688	34.528
14	4.660	5.368	6.571	7.790	9.467	10.821	13.339	16.222	18.151	21.064	23.685	26.873	29.141	36.123
15	5.229	5.985	7.261	8.547	10.307	11.721	14.339	17.322	19.311	22.307	24.996	28.259	30.578	37.697
16	5.812	6.614	7.962	9.312	11.152	12.624	15.338	18.418	20.465	23.542	26.296	29.633	32.000	39.252
17	6.408	7.255	8.672	10.085	12.002	13.531	16.338	19.511	21.615	24.769	27.587	30.995	33.409	40.790
18	7.015	7.906	9.390	10.865	12.857	14.440	17.338	20.601	22.760	25.989	28.869	32.346	34.805	42.312
19	7.633	8.567	10.117	11.651	13.716	15.352	18.338	21.689	23.900	27.204	30.144	33.687	36.191	43.820
20	8.260	9.237	10.851	12.443	14.578	16.266	19.337	22.775	25.038	28.412	31.410	35.020	37.566	45.315
21	8.897	9.915	11.591	13.240	15.445	17.182	20.337	23.858	26.171	29.615	32.671	36.343	38.932	46.797
22	9.542	10.600	12.338	14.041	16.314	18.101	21.337	24.939	27.301	30.813	33.924	37.659	40.289	48.268
23	10.196	11.293	13.091	14.848	17.187	19.021	22.337	26.018	28.429	32.007	35.172	38.968	41.638	49.728
24	10.856	11.992	13.848	15.659	18.062	19.943	23.337	27.096	29.553	33.196	36.415	40.270	42.980	51.179
25	11.524	12.697	14.611	16.473	18.940	20.867	24.337	28.172	30.675	34.382	37.652	41.566	44.314	52.620
26	12.198	13.409	15.379	17.292	19.820	21.792	25.336	29.246	31.795	35.563	38.885	42.856	45.642	54.052
27	12.879	14.125	16.151	18.114	20.703	22.719	26.336	30.319	32.912	36.741	40.113	44.140	46.963	55.476
28	13.565	14.847	16.928	18.939	21.588	23.647	27.336	31.391	34.027	37.916	41.337	45.419	48.278	56.893
29	14.256	15.574	17.708	19.768	22.475	24.577	28.336	32.461	35.139	39.087	42.557	46.693	49.588	58.302
30	14.953	16.306	18.493	20.599	23.364	25.508	29.336	33.530	36.250	40.256	43.773	47.962	50.892	59.703

For larger values of df, the expression $\sqrt{2\chi^2} - \sqrt{2df - 1}$ may be used as a normal deviate with unit variance, remembering that the probability for χ^2 corresponds with that of a single tail of the normal curve.