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PARENTAL INVOLVEMENT IN CAREER DEVELOPMENT
OF
CHILDREN

By
SYLVIA PALMER

B.Ed. University of Alberta 1965
M.A. University of British Columbia 1982

A DISSERTATION SUBMITTED
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF
DOCTOR OF EDUCATION
in

THE FACULTY OF GRADUATE STUDIES
(Department of Counselling Psychology)

THE UNIVERSITY OF BRITISH COLUMBIA
February, 1986
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78

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Department of Counselling Psychology / Education

The University of British Columbia
1956 Main Mall
Vancouver, Canada
V6T 1Y3

Date April 14, 1986

ABSTRACT

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The purpose of the study is to determine the extent to which a program for parents to assist their adolescent children in career development, facilitates the adolescent's level of career maturity and perceptions of family cohesion and adaptability.

The study design employed an experimental and control group. The treatment consisted of a structured program designed for parents to assist in the career development of their children. The sample for the study consisted of 40 volunteer families from five schools. Each family had a child in grade ten or eleven. A four week time period was allowed for the treatment portion of the study. Families were pretested and posttested on the Career Planning, Career Exploration, Decision Making, and World of Work Information Scales of the CDI (Super et al., 1980), FACES (Olson et al., 1978), and a questionnaire measuring changes in career maturity and dyadic formation. Each family in the experimental group was interviewed to determine the effectiveness of the program from their own viewpoint.

A multivariate analysis of variance with repeated

measures was used for the analysis of the data. A significant difference was found for the adolescents of the experimental group in career maturity, family cohesion, and career maturity and dyadic formation items of the questionnaire. There was no significant treatment difference for family adaptability. One significant interaction effect, that of treatment by school, indicated there was a slight tendency for students of one school to improve more than students in other schools. Interviews were conducted with the parents in the experimental group to understand specific changes in career maturity, family adaptability and cohesion, and dyadic formation brought out by the quantitative variables.

TABLE OF CONTENTS

	Page
TITLE PAGE.....	i
ABSTRACT.....	ii
LIST OF TABLES.....	viii
LIST OF FIGURES.....	ix
ACKNOWLEDGEMENTS.....	x

Chapter

1. INTRODUCTION.....	1
Purpose of Study.....	1
Background.....	2
Significance of Study.....	6
Definition of Terms.....	9
2. REVIEW OF RELATED LITERATURE.....	11
Career Development Theories.....	11
Instruments for Measuring Vocational Maturity.....	21
Parent Child Relationships.....	26
Instruments for Measuring Family Bonding and Flexibility.....	35
The Influence of Family on Adolescent Career Development.....	39
Career Development Programs That Produce Change.....	44
Program Used in the Study.....	51

Statement of Hypotheses.....	57
3. METHODOLOGY.....	61
Design.....	61
Sample.....	62
Treatment.....	63
Instrumentation.....	66
Analysis of Data.....	72
4. RESULTS.....	75
Quantitative Analysis.....	75
Item Analysis.....	76
Stability.....	77
Assessment of FACES.....	77
Multivariate Analysis.....	78
Qualitative Analysis.....	85
Indepth Interviews with Families.....	86
Telephone Interviews with Families.....	98
Clinical Assessment of Two Families.....	105
5. SUMMARY, IMPLICATIONS, RECOMMENDATIONS....	110
Summary.....	110
Limitations of Study.....	115
Theoretical Implications.....	117

Practical Implications.....	118
Recommendations for Future Research.....	121
Conclusion.....	123
REFERENCES.....	125
APPENDIX	
A: Preliminary Qualitative Study.....	134
B: Questionnaire for Counsellors.....	148
C: Letter to Parents.....	149
D: Letter to Parents.....	150
E: Letter to Counsellors.....	151
F: CDI.....	152
G: FACES.....	162
H: Parent Questionnaire.....	168
I: Student Questionnaire.....	169
J: Interviews.....	170
K: Treatment by School Effects for Students.....	172
L: Summary of Multivariate Analysis on Parent Scores.....	173
M: Summary of Univariate Analysis on Parent Scores.....	174
N: Combined Observed Means for Parents on Outcome Variables.....	175

O-1:Summary of Student Mean and Standard Deviation Scores on the CDI, FACES, and Questionnaire Scales According To Schools.....	176
O-2:Summary of Parent Mean and Standard Deviation Scores on FACES and Questionnaire Scales According to Schools.....	177
P: Distribution of Child Perceptions of Family Types According to the Circumplex Model.....	178
Q: Distribution of Parent Perceptions of Family Types According to the Circumplex Model.....	179
R: Pretreatment Intercorrelations Among Dependent Variables.....	180

LIST OF TABLES

1. Description of Samples Within Schools.....	63
2. Summary of Multivariate Analysis on Student Scores.....	80
3. Summary of Univariate Analysis on Student Scores.....	81
4. Summary of Means and Standard Deviations of Dependent Variables.	83
5. Adolescent FACES Scores Classified According to the Circumplex Model.....	86

LIST OF FIGURES

1. Circumplex Model of Family Systems..... 69
2. Treatment Effect on Students on Outcome
Variables..... 82

ACKNOWLEDGEMENTS

I owe a debt of gratitude to the following people:

Dr. Larry Cochran, my mentor, teacher, and friend, whose knowledge, patience, and encouragement led me through what seemed like an impossible maze. He has taught me, by example, the true meaning of wisdom.

My very dear friend, Iris Lukey, who lived the maze with me and

Jim, who never allowed me to look back.

CHAPTER ONE

INTRODUCTION

The career decisions high school students make can have far-reaching effects on their lives. When a person becomes dissatisfied with a job, that person is apt to become dissatisfied with life in general (Osguthorpe, 1976). The student, graduating from high school, is faced with having to decide whether to seek some kind of post-secondary school training or move directly into the work force. These career decisions are very important, yet students have difficulty explaining how they make them (Anderson et al., 1965, Trudeau-Brosseau et al., 1982). Many parents would like to assist in their children's career planning but do not know how (Lea, 1967, Bratcher, 1982, Brighthouse, 1985). Much has been written, studied and researched about career development but there is little research showing how the parents can help in their child's career development (Lea, 1976, Osguthorpe, 1976, Osipow, 1983).

Purpose of Study

The aim of this study is to determine the extent to which a program designed for parents to assist their adolescent children in career planning, facilitates the children's career maturity, dyadic formation and

influences perceptions of family adaptability and cohesion. The program, A Parent's Guide to Career Counselling, (Cochran & Amundson, 1984) is comprised of three separate modules, each having a number of units. Each unit is completed by a collaboration between the parent and child cooperating to accomplish a particular career task. The parent, acting as a facilitator, helps the child complete each task. An example of a task would be to generate a number of career options or to determine what the individual wants from a career (Cochran & Amundson, 1984).

Background

According to the authors (Cochran & Amundson, 1984), the program is based upon two areas of research: career development of the adolescent and parent-child relationships.

1) Career Development Theory

In terms of career development theory, the authors (Cochran & Amundson, 1984) base their program on the comprehensive model of Donald Super and his colleagues from Columbia University (Super, 1957, 1960, 1964, 1980, 1984). Super (1957) regards career development as a set of stages which follow one after another. To move from one stage to the next, an individual must accomplish a

number of career development tasks. The degree to which a person accomplishes these tasks is a function of the adequacy with which the behaviors appropriate to each stage have been performed. Super (1957, 1960, 1964, 1979) has relied upon empirical research to determine what these career related behaviors are that will help an individual fulfill a developmental stage.

Super's (1957) research is based on a longitudinal study in which he and numerous other researchers (Jordaan, 1979, Myers, 1969, Thompson, 1979) empirically identified certain behaviors of importance for later career progress. These behaviors (e.g. career planfulness, decision making capacities, career exploration, and knowledge of the work world) support the general aim of career development such as heightening self awareness, career awareness and improving decision making competencies.

Career maturity assesses the rate and level of an individual's development with respect to career progress. Super's (1953) longterm aim is to develop a test of career maturity which would measure the extent to which a person completes career tasks appropriately. The instrument that has been derived from Super's research is the Career Development Inventory (Super et al., 1979) which is designed to gauge career maturity by assessing

the individual's capability to perform the tasks of a developmental stage.

2.) Parent Child-Relationships

Research has shown that the family is influential on the choice of a child's career (Anderson et al., 1965, Auster & Auster, 1981, Bratcher, 1982, Osipow, 1983).

One important theory that ties family relations to career development is that of Bronfenbrenner (1979). It is his model that the authors (Cochran & Amundson, 1984) use to explain the family portion of their program. From Bronfenbrenner's (1979) perspective, family members working in dyads on a common task increase the intensity of their relationship. The intensity of the dyadic relationship is progressive, moving the dyad from a basic or most simple form (observational) to the next level (joint activity) and finally to the highest level formation (primary). The observational dyad (level one) occurs when two persons begin to pay attention to one another's activities. When members perceive themselves as doing something together the dyad transforms into a joint activity dyad. Dyad members are likely to develop more enduring feelings toward one another. When these feelings occur the dyad is transformed into a primary or highest form of dyad. Primary dyad members continue to influence one another's behavior even when apart. That is, the

the distinctive feature of this dyad is that members keep one another in mind, even when not present.

The second key ingredient that emerges from Bronfenbrenner's (1979) theory is also central to family theory (Cochran & Amundson, 1984), namely the strength of bonding and the adaptability of the family. Primary dyad formation is thought to lead to increased cohesion and flexibility in a family, since it is regarded as a core condition for personal development. Bronfenbrenner (1979) defines development as, "the progressive, mutual accommodation between a growing human being and the changing properties of the immediate settings in which the developing person lives. This process is affected by relations between these settings (p.21)".

The parent guidance program used in this study, (Cochran & Amundson, 1984) focuses on the parent-child dyad working on career tasks. Accomplishing career developmental tasks as identified by Super (1957) in a dyadic content assumes that an observational dyad may shift to a higher level. The higher level dyad, with its increase in intensity of relationship, will support the developmental tasks more adequately than a lower level dyad.

The experimental program is designed to promote parent-child relationships and career development. The

parent-child dyad is given a common task which is designed to move it from an observational to a joint activity dyad. Instructions in the program on how to communicate will hopefully promote the warmth and trust necessary for the formation of the higher level primary dyad around the issue of careers.

Significance of Study

There seems to be no single time at which an individual makes a career choice, but there are certain periods when decisions are made which narrow the range of choices and thus influence the career path (Ginzberg et al., 1951; Super, 1957). One such period is adolescence. It is therefore important for the adolescent to receive career assistance in order to understand, interpret and cope with the swiftly changing conditions of the present work world (Super et al., 1961). High rates of unemployment and rapid changes in technology (Lea, 1976, Peters & Hansen, 1977, Selz et al., 1980, Brown et al., 1984, Borgen & Amundson, 1984) demand of students the flexibility to be ready for job shifts. Parents have always shown an interest in performing the task of assisting the adolescent in his or her career development, but have received little assistance (Osguthorpe, 1976). Lea (1976) and Osguthorpe (1976) show

that parents should be involved in the career development of their children, but there has been little information to show how this could be done.

It is important to acknowledge two of the reasons why parents might want to be involved in their child's career development.

1) Research (Osguthorpe, 1976, Lea, 1976, Burkhardt et al., 1977, Davis & Kendel, 1981) suggests that the majority of parents are eager to help in a constructive way over a long term, rather than coming in at the last stage of career planning and agreeing with what the other "experts" advise. Many parents know their children's interests and abilities long before actual post secondary career decisions are made and remain interested throughout the children's career growth. Teachers and counsellors know the child for a shorter period of time and therefore may lack the understanding of the enduring quality of the parent-child relationship. The enduring quality of the relationship is apt to have more impact on the child's life (Osguthorpe, 1976). In knowing their children as they do, parents can be of considerable help in career planning.

2) The high rate of youth unemployment (Cunningham, 1983, Herr, 1984, Borgen & Amundson, 1984), cutbacks in school counselling (Holstead, 1983), and the uncertainty

of the 80's makes parents and children more career conscious than ever before. Parents as well as their children, are influenced strongly by technological changes and the economic climate and are concerned about the availability of jobs and the adequacy of job preparation (Osguthorpe, 1976). One goal of the experimental program (Cochran & Amundson, 1984) is to encourage students to be more flexible in their career planning to enable them to adapt to current economic and social situations.

According to a recent British Columbia information survey (Appendix B), counsellors welcome parental involvement in career counselling. This survey involved 102 counsellors in 31 school districts in British Columbia. The results indicated that on average, counsellors are only able to devote 15.8% of their time to career counselling and this is done mostly in large groups. This leaves many students to seek assistance in career planning elsewhere.

Few parents seem to recognize the full effect they have on their children's career development (Cochran, 1984, personal communication). Parental behavior (Anderson et al., 1965, Osguthorpe, 1976, Brown, 1984) is likely to influence the child's life interests, goals and values, all of which have an effect on shaping the child's

life pursuits. Many parents recognize their responsibility for providing a family atmosphere conducive to the development of career interests and would like to encourage their children to develop their potentialities and make good decisions but do not know how. The program, A Parent's Guide to Career Counselling (Cochran & Amundson, 1984) has been developed to assist parents in this task.

Definitions of Terms

Career: The course of events which constitute a life. Super (1957) defines career as a sequence of work or work related positions or occupations, paid or unpaid, that people have during their lives.

Career Development: The process people undergo, consciously or unconsciously, as they interact with their environment and develop the attitudes and skills to explore, plan for, and participate in the world of work. It is a process by which one develops and refines such characteristics as self, career identity and career maturity (Herr and Cramer, 1984).

Developmental Stage: A stage in a time period "characterized by certain tasks which the individual in that stage encounters and with which he must successfully cope before he progresses to the next stage" (Pietrofesa et al., 1975, p.146).

Developmental Task: A task which arises at or about a certain period in the life of the individual, successful achievement of which leads to happiness and success with later tasks (Havighurst, 1956, p.2).

Observational Dyad: This occurs when one member is paying close and sustained attention to the activity of the other, who in turn, acknowledges the interest being shown (Bronfenbrenner, 1979, p. 58).

Joint Activity Dyad: This occurs when the two participants perceive themselves as doing something together. A joint activity dyad enhances reciprocity, balance of power, and affective relations (Bronfenbrenner, 1979, p. 58).

Primary Dyad: This dyad continues to exist phenomenologically for both persons even when they are not together (Bronfenbrenner, 1979, p.58).

CHAPTER TWO

REVIEW OF RELATED LITERATURE

The purpose of this chapter is to present a review of related literature and research as it pertains to the two main areas being examined in this study: parent-child relationships and adolescent career development. The review is presented in five main sections. These are:

- 1) Career Development Theory emphasizing Super's theory of career development.
- 2) Bronfenbrenner's Ecological Model of Dyadic Formations emphasizing parent-child relationships.
- 3) Parental influence on adolescent career development.
- 4) Parent Career Counselling Programs.
- 5) Statement of Hypotheses.

CAREER DEVELOPMENT THEORIES

The career development process that people undergo as they interact with their environment and develop the attitudes and skills to explore, plan for and participate is life long (Super, 1980, 1984). Moreover, in a culture that depends on and reacts strongly to technological changes, an understanding of career

development theory and the process of how to assess one's choices and their consequences is especially important.

According to Tolbert (1974), career development theories can be grouped into five major areas: sociological, psychoanalytical, topological, needs, and developmental.

The proponents of the "sociological" viewpoint suggest that circumstances beyond the individual's control contribute significantly to career choice. The sociological theory emphasizes three interacting social factors (biological conditions, physical environment and social structure) which influence the individual's personal development (Herr and Cramer, 1984). These factors transmit cultural norms and values to an individual which in turn affects occupational choice. The sociological theories include those of Blau et al. (1956), Caplow (1959) and Low (1981).

The "psychoanalytic" theory of career development views selection of an occupation as a sublimation of basic impulses and symbolic gratification relating back to the first five years of life. The theory explains a person's occupational choice in terms of unconscious factors and basic need gratification (Herr & Cramer, 1984).

John Holland (1959) is a proponent of the "topological" theory which is based on the belief that the choice of an occupation is an expressive act which reflects a person's personality. Four assumptions constitute this theory: 1) there are six personality types into which most people can be categorized, 2) there are six different environments, each of which is dominated by one of the personality types, 3) people search for work which allows them to exercise their skills and abilities, 4) a person's behavior is determined by the interaction between his or her personality pattern and the pattern of his or her environment. The six personality and environment types are: realistic, investigative, artistic, enterprising, social and conventional. Holland (1959) maintains that one of these six types determines the primary direction of one's vocational choice.

Another category of career development is the "needs" theory whose major contributor is Roe (1957). Her model emphasizes the satisfaction of needs as suggested by Maslow (1969). Because of differences in personality structure, individuals develop certain needs and seek satisfaction of these needs through occupational choices. Roe linked childhood experiences with career interests. The emphasis of her theory is

that personality differences affect how people interact and that personal variations are a function of early childhood family relationships. Occupational selection is determined by early child-rearing practices which affect types of needs and the ways in which people seek to satisfy them.

The fifth category focuses on the "developmental" theory in which Super (1957, 1960, 1964, 1984) has taken the most comprehensive view. He views the vocational choice process as on-going, becoming more clearly defined with age and varying with one's view of reality. This study focuses on a program that, according to the authors, has the theoretical underpinnings of Super's (1957) theory.

Super follows the Ginzberg, Ginsburg, Axelrad, and Herma (1951) model of career development which is described as a process with three clearly defined periods: Fantasy, Tentative, and Realistic. This process begins at age 12 and culminates in an occupational choice in one's early twenties. Ginzberg and his associates describe the process as a series of experiences and information received up to that point. Their theory parallels the physical development of young people and emphasizes the turbulence of adolescence.

Super's (1957) theory describes change as an occurrence which is progressive and normative. Career

development evolves in accordance with a gradual, predictable process. Growth occurs as the individual progresses from one stage of development to another with each stage consisting of developmental tasks. Career task accomplishment would indicate that, at varying points in one's career growth, the individual should demonstrate specific career related behaviors which accomplish tasks appropriate for a particular stage.

Super (1957) identifies the stages of vocational development as: Growth (birth to 14 years), Exploration (ages 15 - 24 years), Establishment (ages 25 - 44 years), Maintenance (ages 45 - 64 years), and Decline (ages 65 to death). The model's first stage (Growth) is dominated by the influences or interactions with significant people which affect the child's career choices. The development begins with the first phases of the exploration of self within the environment.

A major focus of this study involves the second stage, namely that of adolescence which involves exploration. This stage encompasses the ages of 15 to 24 years. Exploration during adolescence involves trying new roles and entering a variety of situations to confirm or contradict a similarity between the self concept and the model he or she sees. The individual seeks information about himself and the environment. The substages for this phase include: the Tentative stage

(15-17), Transition stage (18-21), and the Trial-Little Commitment stage (22-24). By age 17, the tasks of the Tentative stage include planning and crystallizing one's goals. Interests, needs and values are all considered, tentative choices are made and possible fields of work are identified. Specification of a vocational preference is the task of the Transition stage (18-21). The older adolescent is expected to convert a generalized choice into a specific one and implement the steps necessary for specialized training or education if necessary. By ages 22-25 (Trial-Little Commitment stage), the task is to implement a choice and convert the vocational preference into reality.

The Establishment stage which begins in the mid twenties, is an implementation of an individual's career choice. He or she seeks to enter permanent employment. The expectation is to pursue self realization by finding and securing a place in a chosen occupation. Towards the latter part of this stage, the individual consolidates his or her skills and expertise and increases his or her sense of security and comfort in the chosen career.

The Maintenance stage begins in the mid-forties and represents a time when an individual either keeps abreast of the skills needed for the present career or re-establishes oneself in a new career. The task is to

preserve achieved status and gains. The Declining stage (age 64 on) parallels that of life in general and represents a slowing of pace and decreasing involvement; a prelude to retirement.

Super bases his theory on a longitudinal Career Pattern Study which he and his colleagues (Super & Overstreet, 1960, Super & Jordaan, 1963, Super, Kowalski & Gotkin, 1967, Super & Bohn, 1970, Super, Thompson & Lindeman, 1979) conducted from 1950 to 1971. The Study, which involved 142 grade nine boys, was designed to gain an understanding of and develop techniques to assess and predict vocational behavior. This study would help determine the specific career related behaviors and skills suggestive of task mastery. Super (1957) developed one of the basic assumptions which underlies the concept of vocational maturity: "vocational behavior changes systematically in certain ways with increasing age" (p.57).

Super and Overstreet (1960) tested the concepts of career maturity and identified five dimensions related to it. These were: 1) orientation to vocational choice, 2) information and planning about a preferred occupation, 3) consistency of vocational preferences within fields, within levels and within families, 4)

crystallization of traits, and 5) wisdom of vocational preference. The results showed that only two dimensions (orientation to choice tasks and use of resources) were relevant to grade nine boys. They concluded that vocational maturity in ninth grade boys is related to their degree of intellectual and cultural stimulations. The authors stated that ninth grade boys are not ready to make sound curricular choices at this time and that curricular decisions should be postponed until the tenth or eleventh grade.

Jordaan (1963), attempting to define exploratory vocational behavior, found that the environment and personal traits of an individual may facilitate this behavior. For example, parents can facilitate exploratory behavior by providing emotional support and an atmosphere conducive to career development.

Super (1963) proposed that vocational maturity assumes different characteristics which depend upon the person's life stage of development. A further study (Super & Bohn, 1970) found a correlation between vocational maturity and personal development. Subjects who scored high in vocational maturity were also more achievement oriented, independent, and sociable.

In Super's report of the Career Pattern Study (1964), he found that 18 year-old participants still

had not completely crystallized their career choice. A ten year followup (Super, Kowalski & Gotkin, 1967) found that during this period, fifty percent of the subjects engaged in floundering behavior but by the age of twenty-five, eighty percent were engaged in stabilized behavior. This was confirmed by Super and Jordaan (1982).

A study done by Super, Thompson, Lindeman, Jordaan and Myers (1979) showed that an individual is successively faced with vocational tasks. The way the individual deals with each task determines how this person will deal with future tasks. When a person faces a vocational task, he or she can apply relevant behaviors to successfully complete the task. Super et al. (1979) identify vocational behaviors as: career planning, career exploration, obtaining information and gaining knowledge about the work world and about the self. These career related behaviors can then be used to make decisions as the need arises.

Two inventories were developed by Super and his associates as a result of the Career Pattern Study: The Work Values Inventory (Super, 1957) which relates one's personal values to those values expressed in a career is a biographical, semistructured interview type of inventory. The Indices of Vocational Development

(Super & Overstreet, 1960) was revamped to develop a practical means of measuring vocational development. It became a standard questionnaire called the Career Development Inventory (Super et al., 1979). This inventory yields three scales designed to measure areas of vocational maturity: planning orientation, resources for exploration, and decision making.

With respect to the career development process, Super (1957) considers the influence of the family to be very important. Parents are seen as having a great impact on the child's self concept which eventually affects career choice. The family provides the child the opportunity to identify with various adult role models and to acquire information and skills relevant to occupations. To illustrate further, Super (1957) states:

Factors which have so far been given little systematic study but which appear to affect vocational behavior and development are: religious background, atmosphere of home (warm, hostile, broken), parental attitudes toward the individual (acceptance or rejection), and parental attitudes toward schooling (p.52).

Summary

Of the five major theories on career development, Super (1957) takes the most comprehensive and empirically grounded view. Super bases his research on a longitudinal study (Career Pattern Study, 1957) which views vocational maturity as the accomplishment of a series of vocational tasks in an orderly sequence of life stages. Vocational maturity can be assessed by determining an individual's vocational behavior characteristics or developmental tasks attained. Super's construct of vocational maturity has become a major concept in the career choice process. Career maturity is a factor to be assessed in this investigator's study.

Instruments for Measuring Vocational Maturity

What is the value of knowing how vocationally mature a student is? Super and Overstreet (1960) stated that an individual's stage of career maturity will determine the degree of effectiveness of vocational planning. According to Super and Overstreet (1960), a measure of vocational maturity can help in the exploratory stage of vocational development to determine if the individual can cope adequately with the decision-making task being faced.

The measures of vocational maturity most frequently used (Hilton, 1974) are: The Career Maturity Inventory

(Crites, 1961), The Cognitive Vocational Maturity Test (Westbrook, Parry-Hill, & Woodbury, 1971), and The Career Development Inventory (Super et al., 1979). Hilton (1974) describes these instruments as the most likely to be selected by professional counsellors, particularly for program evaluation purposes.

a. The Career Maturity Inventory (CMI)

Crites (1961) used Super's Career Pattern Study to develop the Vocational Development Inventory which was later renamed the Career Maturity Inventory. Crites describes the maturity of an individual's vocational behavior as shown by the degree of similarity between his or her behavior and that of the oldest individuals in his or her vocational life stage.

Vocational maturity includes four factors: a) career choice attitudes, b) career choice competencies, c) rationality of career choice, and d) consistency of career choice. These factors are related to Super's five constructs for the measurement of vocational maturity.

The CMI consists of two sections: the Attitude Scale and the Competency Scale. The Competency Scale is a more recent development and does not have the psychometric characteristics of reliability and validity completely determined. It is used primarily with

students in the fifth through the twelfth grades and takes three hours to administer.

b. The Cognitive Vocational Maturity Test (CVMT)

The CVMT was developed by Westbrook, Parry-Hill, and Woodbury (1971) in order to measure the cognitive domain of vocational maturity. It deals with acquiring and using occupational information used in career education programs and is designed for use in grades six through nine. Although the data concerning the standardization group for the CMVT showed sound standardized procedures, little further research has been done to show validity. Two hours are necessary for administration.

c. Career Development Inventory (CDI)

The most comprehensive research concerning vocational maturity has been done by Super et al. (1960). Most of the research concerned The Career Pattern Study, a 20 year longitudinal project, designed to test vocational maturity concepts suggested by Super's (1957) theory.

The CDI answers two questions: a) Is vocational maturity a multi-dimensional construct rather than a single variable and b) is vocational development a process of acquiring, clarifying, and implementing a self concept through preparation for and participation

in the world of work. Intercorrelational and factorial analysis of the data from the Career Pattern Study showed five indices to be related to a significant degree: "1) Concern with choice, 2) Acceptance of responsibility for choices and planning, 3) Specificity of information about the preferred occupation, 4) Specificity and extent of planning, and 5) Use of resources in orientation (Super & Overstreet, 1960, p. 62)". Super and Overstreet (1960) concluded that these five indices were of particular value during the entire secondary school period.

The CDI is an objective, multifactor, 120 item, self-administering inventory. Four types of data can be obtained from the CDI: 1) Individual scale scores, which quantify specific elements of career development, 2) Responses relating to the planning and use of resources, 3) Two factor scores, which quantify attitudinal and cognitive dimensions, and 4) A composite score which reflects a global measure of vocational maturity (Super et al., 1979). A copy of the CDI appears in Appendix F.

The CDI (High School Form) was organized explicitly around Super's (1957) model of vocational maturity which assumes the basic dimensions of planning, exploration, information, decision-making and reality orientation. The planning and explorational components are

attitudinal in nature. The information and decision making components are considered cognitive. This form is discussed in detail in the "Instrument" portion of the study.

Several other instruments are available but perhaps less suited for program evaluation purposes. Two of these are: Readiness For Vocational Planning (Gribbons & Lohnes, 1968), and The Vocational Maturity Scale (Westbrook, 1971). There is little information about the use of these instruments in research and little information concerning their reliability and validity.

Summary

There are three main instruments used to measure vocational maturity: the Career Maturity Inventory, the Cognitive Vocational Maturity Test and the Career Development Inventory. An advantage of using the Career Development Inventory is the extensive research that has gone into its development compared with other career maturity instruments. It is also a multifactor instrument which can be administered in about sixty minutes compared to the CMI and the CVMT which takes three and two hours respectively.

PARENT-CHILD RELATIONSHIPS

Although there was a great deal of research literature about the family prior to 1960, it wasn't until the early 1960's that systematic research on family dynamics became formalized. The study of how family members interact with each other in response to stimuli from the environment began at the Mental Institute in Palo Alto (Bateson et al., 1956). It was here that mental illness began to be conceptualized in terms of entire systems of persons rather than isolated intrapsychic processes. The study of schizophrenia (Bateson et al., 1956) in a single series of experimental studies seemed inappropriate, so individuals were observed in the context of daily, social interactions often with their families. One theory that reflects this approach is the General Systems Theory (Von Bertalanffy, 1968).

The General Systems Theory propounded by von Bertalanffy (1968), provides the basis of many attempts to describe a circumscribed domain of family interaction (Olson et al., 1983). It seeks to encompass the totality of relationships, claiming that a whole system varies qualitatively from a group of parts. This suggests that the system as a whole cannot be adequately conceptualized unless the dynamic relationships among system components are taken into account. Bertalanffy

contended that by identifying redundant interaction between components, a system can be classified according to the relationship patterns observed. Applied to the human experience, this would suggest that attempts designed to understand human behavior might better be served if focus is shifted from attempting to explain behavior in accordance with human nature toward identifying patterns of behavior exhibited by individuals in relationship to others.

Young (1979) describes the General Systems Theory as having two basic types of systems: open and closed. The closed system represents separation from the environment, isolation from external stimulation and internal confusion. The closed system cannot adapt to change. The open system, on the other hand, is described as having contact with and adapting to the environment. Young classifies the family as a social unit representing the living-open system which is defined by the following six essential principles: 1) a system is a whole composed of interrelated parts; 2) a change in one part leads to a change in all parts; 3) a system is the product of the dynamic interaction among the parts; 4) a system will seek and maintain homeostasis; 5) a system will resist change; but 6) an open system can accommodate change.

Beavers (1977) describes the living-open system as having the capacity to exercise varying degrees of independence, being able to exert power over itself and being able to select among options available in the environment.

Olson et al. (1983) describe three aspects of family behavior (cohesion, adaptability and communication) that appear as underlying dimensions for family functioning in an open system. The family cohesion, adaptability and communication concepts have been previously researched by individuals observing family problems from a general systems view (Olson et al., 1983). Olson (1983) hypothesizes that the central levels of cohesion and adaptability are most viable for family functioning. Communication is critical to the movement on the other two dimensions. Positive communication skills (empathy, reflective listening) enable families to share with each other their changing needs and preferences as they relate to cohesion and adaptability (Olson et. al, 1983).

Olson (1980) defines cohesion as "the degree to which an individual is separated from or connected to his or her family (p. 5)." Most research (Wynne et al., 1958, Levinger, 1965, Stierlin, 1979, Olson et al., 1983) addresses the extremes of cohesion giving more

attention to dysfunctional families. A balance on the cohesion dimension relates to more adequate healthy family functioning.

Olson (1978) stresses the importance of adaptability in family functioning. He defines adaptability as "the ability of a family system to change its power structure, role relationships, relationship rules in response to situational and developmental stress (p. 12)." Olson et al. (1983) identify four stages in the family life cycle, one of which is the "Family with Adolescents". It is this stage which shows the greatest decrease in family adaptability because adolescents view families as less flexible at this stage.

There is widespread consensus on the importance of communication in family relationships (Watzlawick et al., 1967, Miller et al., 1975, Satir, 1972). Most research addresses the spousal relationships only (Olson et al., 1983). Communication is an important ingredient in family functioning (Olson, 1979) because it facilitates movement on the cohesion and adaptability dimensions. Steinberg (1981) examined the impact of physical changes of adolescents on family relations and found significant differences in the way adolescents interact with parents. Adolescents (Cooper et al., 1982) experiencing family support may feel freer to explore

identity issues. Barnes and Olson (1985) report adolescents perceive less openness and more problems in intergenerational communication than their parents. They found that families with good parent child communication had higher levels of family satisfaction, namely cohesion and adaptability. A model that addresses aspects of cohesion, adaptability and communication in "normal" families is that of Bronfenbrenner (1979). The senior author of The Parent's Guide to Career Counselling (Cochran & Amundson, 1984) program indicates that his theory (Bronfenbrenner, 1973) serves as another basic building block in their approach.

Bronfenbrenner takes into account the environment in which the family members live. He defines development as the way in which a person perceives and deals with his or her environment. His is a theory of environmental interconnections and their impact on the developing person. Environmental events and conditions outside the immediate setting containing the individual can influence behavior and development within that setting. Human development is seen as a "progressive accommodation throughout the life span, between the growing organism and the changing environment in which it actually lives and grows (Bronfenbrenner, 1977, p. 513)."

Bronfenbrenner's (1979) model is conceived as a set of nested structures which he refers to as systems. The innermost structure (the microsystem) is the immediate setting containing the developing person. The microsystem deals with interactions within the immediate setting. The structure surrounding the microsystem is called the mesosystem and contains the settings beyond the immediate setting and the interrelations between them. (Example: for a child, this would include the relations among home, school and neighborhood peer groups).

The third structure (the exosystem) contains events occurring in settings in which the person is not even present but which have an effect on the developing person. (Example: a school class attended by an older sibling). The outer structure (the macrosystem) contains the general patterns common to a culture or a subculture. A person's activities may be confined to experiences in and of the immediate setting but they can take on a higher order of complexity through the introduction of relations with people.

Bronfenbrenner's model provides a framework to understand relationships in families (microsystem). He uses dyadic formations to describe family relationships. These formations range from the immediate

dyad and move progressively toward a more complex one to describe family relationships. There must be an established relationship for a dyad to exist. When this occurs the dyad can have three functional forms which become progressively complex:

- 1) The observational dyad occurs when one dyad member pays close attention to the other's activity who in turn acknowledges the interest shown. This evolves into the next form of dyad.

- 2) The joint activity dyad occurs when members of the dyad perceive themselves as doing something together. A joint dyad exhibits reciprocity which motivates the members to persevere and to engage in progressively more complex patterns of interaction which can carry over to other times and places. A dyad can contain a member that is more influential than the other, but the power can shift when the other member is given control over the situation. Bronfenbrenner (1979) states, "This transfer often takes place spontaneously as a function of active character of the developing person in relation to the environment (p. 58)." As members engage in interaction, they develop more pronounced feelings toward one another. This evolves into the next form.

- 3) The primary dyad occurs when the members are

not together but are in each other's thoughts and continue to influence one another's behavior even when apart.

Bronfenbrenner's (1979) model provides a key to understanding developmental changes in parent-child relationships. If one member of the dyad undergoes a process of development, the other member is apt to as well. It is a progressive model which begins with observing another member, then moving to a more complex, meaningful relationship which involves feelings and an awareness of the other member even in his or her absence. The family interaction process exerts an influence on many factors in the life of an individual (Young, 1984). The interaction between any two members of a family involves the emotional and physical climates that characterize the entire family and the degree of relationship between members of the family.

This study focuses primarily on the joint activity dyad. Through a series of structured activities, the parent and child are able to work together to help the child to accomplish a career task. As relationships intensify, Bronfenbrenner's model would indicate a movement from the joint activity dyad to a primary one. This movement covers certain principles that Bronfenbrenner sees as important to achieving this

goal. As family members pay full attention to the task, each is able to give and take without fear of giving offense. Bronfenbrenner (1979) views the healthy personality development of the adolescent within the family setting as requiring a balance of parental support and control. A healthy family environment promotes bonding and flexibility. As a dyad progresses to a higher form, there is apt to be an increase in bonding between family members and they should be more able to effectively adapt to situational and relationship changes.

Summary

Over the past decade, a body of family theory and research has been generated which demonstrates the salience of cohesion and adaptability in describing the healthy family functioning. Bronfenbrenner's (1979) theory of family development is viewed as a living open system striving to maintain a state of internal balance. This balance depends upon the individual being able to adapt to changes within the family setting through effective communication and family cohesion.

Instruments for Measuring Family Bonding and Flexibility

How can the concept of dyadic relationships, family bonding and cohesion be measured? A review of the literature indicates that there are few instruments that are used in measuring family relationships. Four of the more common measurements are described.

a. Family Concept Test (FCT)

Van der Veen (1976) investigated the perceptions of individual family members relative to their family's attitudes, feelings, and expectations. The FCT was constructed to measure these perceptions. Factor analysis of the scores disclose two factors: family integration and adaptive coping which closely parallel the cohesion - adaptability dimensions mentioned earlier. There appears to be little further research to show validity.

b. Family Relations Test (FRT)

The Family Relations Test (Bene, 1965) defines the components of recalled relationships. Individuals engage in active participation in the recollection of past experiences. The test necessitates individual administration whereby the subject gives the examiner information about family members. Caution is recommended because this is done verbally and individual contact can produce examiner bias.

c. Family Environment Scale (FES)

FES (Moos & Moos, 1976) assesses the social climate of all types of families and focuses on the interpersonal relationships among family members, directions of personal growth which are emphasized in the family, and system maintenance in the family. The relationship dimensions include subscales of cohesion, expressiveness, and conflict and assess the extent to which family members feel that they belong to and are proud of their family. The subscales of the personal growth dimension are independence, achievement orientation, intellectual-cultural orientation, active recreational orientation, and moral-religious emphasis. These measure the emphasis within the family on developmental processes that may be fostered by the family. The system maintenance dimension includes organization and control. They obtain information about the organization within the family. The instrument while presenting empirical justification (Fuhr et al., 1981, Bell & Bell, 1982) appears to lack construct validity on the cohesion dimensions (Russell, 1980).

d. Family Adaptability and Cohesion Evaluation Scales (FACES)

Bronfenbrenner (1979) refers to the bonding and flexibility of families as part of dyadic formation.

When dyads move to higher, more complex forms, there is an increase in cohesion and a greater ability to adapt to change. A measure which focuses on these two dimensions is Olson's (1979) Family Adaptability and Cohesion Evaluation Scales. Olson delineates two aspects of family behavior, cohesion and adaptability, that appear as the underlying dimensions for many concepts describing family dynamics. A balanced degree of cohesion and adaptability is most functional to family development. Olson defines family cohesion as "the emotional bonding members have with one another and the degree of autonomy a person experiences in the family system (p.5)." The variables used to measure family cohesion are: emotional bonding, boundaries, coalitions, time, space, friends, decision making, and interests and recreation. Olson identifies the second dimension in his model as adaptability. Olson (1974) defines adaptability as "the ability of a family system to change its power structure, role relationships, relationship rules in response to situational and developmental stress (p.12)." The variables used to measure adaptability are: family power, negotiation styles, role relationships and relationship rules.

FACES (Olson, Bell & Portner, 1979) is a self-report instrument which measures cohesion and

adaptability in families. It is used by counsellors who are interested in assessing families in terms of their adaptability and cohesion levels. The instrument in its entirety is presented in Appendix G.

One complication however, in the use of FACES is that excessively high levels of cohesion and adaptability are not positive. Balanced family functioning involves the middle range of scores. Extreme scores are indicative of imbalanced family functioning. On the dimension of adaptability, flexible functioning might become chaotic in extreme and structured functioning might become rigid. On the dimension of cohesion, a connected family might become enmeshed and a separated family might become disengaged. Since the extremes of each scale of FACES are regarded as problematic, the scales cannot be indiscriminately used as measures of improvement. Rather, caution must be taken to see that improvements are within the middle range without crossing over into the problematic extremes.

Summary

The measuring of family relationships has been supported by several studies (Walsh, 1983) using projective instruments rather than objective ones. FES and FACES are two instruments supporting family relation-

ships in which scoring and results obtained are objective.

FACES seems particularly well suited to this study of dyadic formations in the family and career maturity because the instrument relates directly to family cohesion and adaptability and is objective.

THE INFLUENCE OF FAMILY ON ADOLESCENT CAREER DEVELOPMENT

The literature which addresses the effects of families on a child's career choices is extensive and varied. The different criteria such as socioeconomic status, level of education, family constellation, and parental attitudes can affect vocational choices. This section addresses the influence of parents as primary motivators on the adolescent child's career development.

Bratcher (1982) noted that the systems model can be used in examining career choices. His basic assumptions were: 1) the family is the primary emotional system of a person; 2) the family has influenced and will continue to influence the course and outcome of its members' lives; 3) relationships within the family tend to be reciprocal and patterned; and 4) each family member affects and is affected by every other family member. Parents are among the primary socializing agents in our society. As such, they are in key positions to influence their children's values and behaviors. The impact of parental guidance is as strong in career development as

it is in all other areas of human growth (Osipow, 1983).

Birk (1979) reports that adolescents consistently report parents as the most responsible for their career selection. Mitchell (1979) found that seventeen year olds talked over their future career plans with their parents almost twice as frequently as the next person. Roberts (1979) found that a majority of grade ten students reported that their parents were their most important source of help when making vocational plans.

Parents are interested in helping their children with career planning (Schulenberg et al., 1984). Burke et al. (1979) conducted a study which examined parental impact upon the career decisions of children. When asked who they thought had the most influence upon a child's career growth, the children responded that both parents were influential factors. Gulick's (1978) survey indicated that 92% of the parents viewed themselves as key people in the career development of children. Ninety-five percent of the parents wanted to work with their children and the school in exploring career options of interest.

The influence of parents in the development of their children's occupational plans was reported in a study by Anderson, Mawby and Olson (1965). Based on the more general postulate that behavior patterns of youth are a consequence of parental aspirations for

their children, Anderson et al.(1965) offer the following propositions: 1) Parents are the major reference group in the formation of education and occupational aspirations of youth; and 2) Young people tend to follow the educational and occupational guidelines formulated for them by their parents.

Schoffner and Kleimer (1973) suggest four areas of parental influence regarding career development: parents serving as role models, as motivators of their children's interests and activities, as information givers, and as providers of a developmental environment. Werts (1967) found that parents provide work role models with which children can identify and that certain occupations (engineering, architecture, chemistry and botany) of fathers are associated with similar career choices of sons.

As motivators, parents provide the encouragement necessary to pursue interests and recognize successes of their children. By providing an environment that is warm and trusting, parents can encourage their child's career development to the extent that their child is able to make effective career decisions (Schoffner & Kleimer, 1973). "If parents provide a harmonious atmosphere in the home, the child can be better prepared in interpersonal relationships. The way the child reacts

with family members is an indication of the way he may act with co-workers (Schoffner & Kleimer, 1973, p. 424)."

Grandy and Stahman (1974) explored whether parents provide opportunities for some vocational experiences while discouraging others. Their sample consisted of male and female expressed occupational choices and the occupations of their parents. The results indicated that sons with personality types similar to their father's chose similar occupations.

Mortimer (1976) reported on the association between father's occupation, family relationships and adolescent son's vocational decisions. The study was conducted to determine if aspects of the father's occupation would be expressed in the father-son relationship which would affect the son's career choice. The findings suggest that sons of fathers with prestigious occupations and a close relationship, more readily internalize the work values of their fathers and therefore move in a similar career direction.

Summary

The outcomes of studies involving adolescent career development and intra-family relations are varied. Studies addressing the influence of diverse forms of familial involvement suggest that family involvement,

expressed in career ambitions for their adolescent child, is associated with favorable career development outcomes. Adolescents tend to identify with parental figures and the strength of role identification may be influenced by the parent's guidance of the adolescent. Although several studies show the family as being the most influential factor in career selection, little is known about how this is brought about. Few studies explicitly investigated the relationship between family members and career development variables.

CAREER DEVELOPMENT PROGRAMS THAT PRODUCE CHANGE

A review of literature (Anderson et al., 1965, Schoffner & Kleimer, 1973, Roberts, 1979, Osipow, 1983) indicates that parents play a significant role in the career development of their children. However, there is little support or assistance available for them to fulfill the role of guiding their children through the developmental process of vocational achievement (Osguthorpe, 1976). A review of the literature indicated that there are several innovative career programs for parents but little empirical evidence of their effectiveness. Few recent studies address programs which have been developed to help parents in the task of helping their child in career development. A Michigan

group (Anderson, Mawby & Olson, 1965) designed and implemented a program called Career Occupational Guide which was built around the theme "youth development" through an action program for parents. It was their goal to help parents and their adolescent children become aware of the link between the governmental agencies, private business and industrial sectors, universities and the world of work. Materials were provided for all parents of all high school students in a multi-county area. The program received favourable verbal support from those who used it.

A program entitled Choices and Career: Free to Choose About Careers, was designed by Thompson (1978) for American Indian parents to use with their adolescent daughters. The program includes information about career opportunities as well as barriers these girls may face in finding work. No assessment could be found of the success of the program.

Lea (1976) describes a workshop intended to give parents of high school sophomores and juniors information about the nature of vocational choice so that they might be a more understanding and helpful resource for their children as they make career plans. The parents took the Vocational Preference Inventory and responded in three ways: 1) as they preferred, 2) as

they thought their children would answer, and 3) as they hoped their children would answer. The information obtained from these responses served as a stimulus for discussions about the complexity of career choice. A followup survey revealed that twelve of eighteen parents involved, thought about their child's career planning after the workshop and all indicated they had talked to their children about career planning after the workshop.

Another program designed for parents, The Career Conversation was designed and implemented by Osguthorpe (1976). The purpose of this program was to help parents work with their children in career planning. The pilot program was offered to thirty students at the ninth grade level and their parents. The feedback from the parents who participated was encouraging. The results of the study brought out the following information: students expected parents to be most influential in helping them make their career choices; parents felt that prior to the program they were not equipped with the necessary skills to help their children; and teachers felt that, although it was the responsibility of parents and counsellors to help students make a career decision, parents were probably most influential.

Greenough (1976) designed and implemented a guidance program for parents of upcoming senior

students. The purpose of the program was to incorporate parental guidance and interest into the planning process of a senior student. The study measured the accomplishments of the graduates five and six years after completing high school. Greenough found that the parent counselled students had a 90% chance of completing a post high school education and were reasonably satisfied with their present occupation. The students whose parents chose not to participate in the program indicated a 20 - 60% probability of error when compared to the same achievements as the parents counselled. The results of this study indicated that the program appeared to help students select a preplanned major, receive a post secondary degree and be satisfied with their present occupational choice. The students with technical training did not receive significant help from parents with their occupational choice. Greenough concluded there is a strong relationship between students reasonably satisfied with their occupational choice and parents who were involved in the parent counselling program.

Another program called Career Development Partnership (Myers et al., 1979), developed for the Rhode Island Department of Education linked parents,

students and schools. It involved parents in the career education of students at all levels in school. The goal of the program was to make parents more aware of their role in the career decision making processes of their children. The program sought to enhance the parent-child relationship in a manner which would foster vocational development. The authors report that the program was well received by parents in the community.

There is evidence to indicate that some school based career development programs have a high success rate. Otte and Sharpe (1979) studied 28 seventh graders involved in a career exploration program for one semester. They reported that subjects made significant gains in vocational knowledge, self esteem, and problem solving. The students were tested with the Self Esteem Inventory and the PECE test developed at the University of Georgia to assess vocational knowledge. The authors concluded that the program was beneficial to these 28 youngsters in attaining a higher self esteem and greater vocational knowledge.

Brandt (1976) studied the effectiveness of a ninth grade prevocational program which lasted four weeks. He used the Career Maturity Inventory as a pre and post test measure to determine vocational maturity change. Two hundred four students were involved, half of which

served as controls. Brandt reported increases in the growth of vocational choice competencies of the treatment group over the control group. However, the increase in posttest scores over pretest scores for the treatment group did not attain significance. He observed that the four week program seemed to benefit the low achievers more than the high achievers.

The review of literature did not reveal many career development programs which used the CDI, but there is evidence to indicate that the studies using this measure had a high success rate.

Hamdani (1977) investigated whether the vocational development of disadvantaged inner city adolescents could be enhanced through a program of curricular experiences which were designed to involve the student in vocational exploration. He administered the CDI as a pre and post measure to 77 grade ten students. The program was done over a four month time period. The results indicated that the posttest mean scores of the students increased significantly over the pretest scores on three of the subscales of the CDI: Scale A, $t=6.14$, $p<.01$, Scale B, $t=5.52$, $p<.01$, Scale C, $t=3.71$, $p<.01$. Hamdani claimed that the career maturity of disadvantaged youth can be facilitated through a career development program.

Yates (1982) evaluated the effectiveness of a junior college career laboratory program using the CDI Form 111 to measure gains in career maturity. A pre-posttest experimental design with a control group was used in the study. The treatment consisted of administering and interpreting the SVIB, exploration of selected careers and a closing counselling session. Thirty-five students in each group were allowed three weeks to complete the treatment. A two-way ANOVA with repeated measures yielded a statistically significant difference at the .01 probability level for the aggregate score of the CDI. The experimental group experienced a gain of 70 points whereas the control group gain was 5 points. The Career Laboratory treatment showed significant impact on the total career maturity of the treatment group.

McCulloch and Cochran (1985) evaluated a peer vocational program based on Blocher's (1977) core conditions of developmental programs. Ten hours a week over a full semester were devoted to the program which trained 10 students to act as peer vocational counsellors. Ten students acted as controls. The students were pre and posttested using the CDI. Over the year, the experimental group changed in career maturity gaining 16 points on the Career Orientation Total of the CDI. Using ANCOVA, the difference in posttest scores of

the group was significant, $F(1,17) = 19.03$, $p < .01$.

A study which bears resemblance to the current study is that of Bearg (1979). She designed a school based career development workshop for parents and studied the impact of the workshop on the career maturity of children. The workshop provided parents with information and communication skills with which to help their children make career decisions. She hypothesized that seniors whose parents participated in the workshop would be more likely to increase in career maturity scores than those seniors whose parents did not. There were fifteen parents in the experimental and twenty-two in the control group. She used the Career Development Inventory as a pretest, posttest measure and found that there were no statistically significant differences between the groups of seniors. A qualitative component suggested that such a workshop on career development was welcomed by parents and students. This study uses the same measure (CDI) and has a similar qualitative component.

The Program Used in this Study

According to the authors (Cochran & Amundson, 1984), The Parent's Guide to Career Counselling is based on the theoretical underpinnings of Bronfenbrenner's (1979) Model of Dyadic Formation and Super's (1957) Theory of Career Development. It is designed to be used

with the adolescent who is in the exploration stage of career development with the emphasis on the latter tentative substage and the beginning of the transition substage. The authors chose this stage because it is at this time (age 15-16) that tentative choices are made and the adolescent is at a point where he or she can begin to plan and implement his or her career goals. It is at this stage that the student considers his or her abilities, interests and values and identifies possible fields of work. The experimental program content stresses activities to discover an individual's abilities, interests and values and proceeds to take the individual through an exploration phase whereby he or she gains information about the work world and eventually makes a tentative career decision. The authors stress the "tentative decision" because the student can mature in his or her career development and choices may change. The authors are also aware of the changing nature of career opportunities in view of current economic situations (Amundson, 1985, personal communication).

An assumption underlying the program is that it is the process of arriving at a decision that is enhanced, not the final decision itself. Specification of a vocational preference occurs when the adolescent has

reached a stage of maturity where he or she can convert a general choice into a more specific one.

According to the authors (Amundson, 1985, personal communication), the program shares Blocher's (1977) core features of effective career programs. These core features include involvement, challenge (tasks are neither too easy nor too difficult), support, structure (having models of advanced functioning to accomplish tasks), feedback (information provided on performance), application (opportunity to apply knowledge and skills), and integration (reflection and integration of learning through discussion). A recent career development program which was described earlier and is based on Blocher's core ingredients is that of McCulloch et al. (1985).

Cochran and Amundson (1984) use Bronfenbrenner's (1979) Developmental model to address the dyadic forces that exist in a relationship. The program is designed to facilitate the interaction between parent and child concerning career decisions. According to Cochran (1985), one very important way to increase the parent-child involvement is to provide activities through structured interviews which can enhance the progression in the closeness or bonding of a relationship. The program relies heavily upon Bronfenbrenner's (1979) five hypotheses of the dyadic

forces that exist in a relationship. These are:

1. Once two persons begin to pay attention to one another's activities, they are more likely to become jointly engaged in those activities.
2. Once two persons participate in a joint activity they are likely to develop more differentiated and enduring feelings toward one another.
3. The developmental impact of the dyad increases as a direct function of the levels of reciprocity, mutuality of a positive feeling, and gradual shift of balance of power in favor of the developing person.
4. Observational learning is facilitated when the observer and the person being observed regard themselves as doing something together. Thus the developmental impact of an observational dyad tends to be greater when it takes place in the context of a joint activity dyad.
5. The developmental impact of both observational learning and joint activity will be enhanced if either takes place in the context of a primary dyad characterized by mutuality of positive feeling (Bronfenbrenner, 1979, p. 56-57).

The authors of the program view the adolescent in

the context of his or her immediate setting (the microsystem), namely the family. They encourage the parent to work with the child to achieve four goals: 1) to improve self understanding, 2) to obtain information about "viable options by matching one's interests, values and capabilities to appropriate occupations (p.28)", 3) to improve decision making skills, and 4) to achieve a good working relationship on the issue of career development (Cochran, 1985a).

The program begins with a particular activity the student enjoys doing. Through discussion the activity moves from an isolated static entity to one among a group of instances. This is viewed as part of a dynamic process in which the relationship between parent and child may change from an observational to a joint activity to a primary dyad formation. This progression occurs as dyads pay attention to each other, respect each other's perspectives, and encourage each other's views in nonjudgemental terms. There can be a striving for a mutual balance of power as the atmosphere becomes more supportive. A detailed account of the pilot study conducted on the program and a copy of the present program appear in Appendix A.

The authors refer to Bronfenbrenner's (1979) concept of change in family dyad formation. Change in

one dyad member produces change in the other member. As the relationship intensifies and career tasks are accomplished the dyad moves to a higher form. The authors view this as a process that increases family cohesion and flexibility. This ability to adapt to change effectively can be measured using Olson et al.'s (1979) Family Adaptability and Cohesion Evaluation Scales.

The present program consists of a parent's manual and three workbooks (described in Appendix A). Cochran (1985) has summarized the program in the following manner:

The manual orients parents to the program stressing the quality of communication and involvement necessary for a successful partnership. The exercises of each workbook were designed both to stimulate parent-child discussions and to forward basic steps of career planning.

The Activities Self-Exploration Workbook attempts to heighten awareness of the known (one's current range of activities) in order to begin exploring the unknown (work activities). Once a list of enjoyable activities is developed, the parent asks what his or her child likes about each, what values are involved, and what strengths are shown. From notes, both partners search through the lists of

likes, values, and strengths to identify ones that recur. These central themes are used as an initial basis for brainstorming a list of potential occupations and launching a search.

Career Grid Workbook

A career grid is a visual frame for organizing a decision. First, through tests, career information, and so on, partners are directed to expand and then narrow a list of suitable occupations. Second, through tests, consultation, and so on, they are directed to expand and then narrow a list of career values. Expansion and contraction is a strategy that allows major principles of decision making to be incorporated into the program, including use of available resources, and that fosters a sense of working together. After occupations are rated on each value, partners are guided through systematic comparison and reasonably thorough deliberation. The workbook ends with a tentative decision. For many, this decision is apt to be a form of practice, but for those who must act soon, it might be a first step toward implementing a direction.

Planning Workbook

Through a series of steps, the workbook guides

partners in identifying institutions for further training or education, determining entrance requirements, estimating costs and resources, and improving oneself. The workbook also includes three scenarios to strengthen awareness of key terms like means, obstacles, contingencies, fall-back options, and so on. Essentially, parent and child work together to form a reasonable career plan (p. 1-2).

STATEMENT OF HYPOTHESES

The effectiveness of the few programs available for parents to help their adolescent children in setting a career direction have not been empirically supported (Anderson et al., 1965, Lea, 1976, Osguthorpe, 1976, Greenough, 1976, Thompson, 1978). The only consistent indication is that parents seem to welcome assistance. The primary aim of this research is to measure the effectiveness of one program that was designed for parents to assist their adolescent children in career development and to determine if this program influences the adolescent's level of career maturity, and perceptions of cohesion and adaptability. Below are the two hypotheses of this study along with a brief summary of the theoretical rationale for each.

1. If parents use the Cochran and Amundson (1984) program to work with their adolescent children, their

adolescents will gain in career maturity compared to adolescents not involved in the program, as measured by the CDI.

This hypothesis is based directly upon Super's (1957) theory of career development. To summarize, career development involves a progression through career stages. Progression is dependent upon the fulfillment of specific career development tasks. To successfully complete these tasks requires the development of certain attitudes and competencies. Nearing the end of adolescence, the developmental tasks relevant to this study are crystallizing, specifying, and implementing a vocational preference. These are the core tasks of the exploration stage. To accomplish these tasks successfully, Super (1957) has empirically identified four factors: planfulness, decision competencies, exploratory attitude (as indicated by the quantity and quality of resources used), and information about work. The present program was designed to facilitate these four factors and others such as self awareness. If a parent is reasonably successful in helping his or her child to strengthen planfulness, decision competencies, exploratory attitudes, and information about work, it follows that the child will manifest more career maturity, and more readiness to successfully accomplish the developmental

tasks of the exploration stage.

2. If parents and their adolescent children work together on the Cochran and Amundson (1984) program, their adolescents will report gains in family cohesion and adaptability compared to adolescents not involved in the program, as measured by FACES.

This hypothesis is based directly upon Bronfenbrenner's (1979) theory of dyadic progression. To summarize, an observational dyad is formed when two people begin to pay attention to one another. If they pay attention, they are more likely to become jointly engaged in a common activity. A joint activity dyad is formed when two people participate in a joint activity. As they participate, they are more likely to "develop more differentiated and enduring feelings toward one another (p.59)." A primary dyad is formed when each member of the dyad thinks of the other when apart, is the focus of strong emotions, and is influenced by the other's presence when apart. As feelings of caring are established, it is more likely that a primary dyad will be formed. The present program was designed to facilitate the factors (paying attention, mutual warmth and feeling) that stimulate dyadic progression. If a parent and child are reasonably successful in cultivating the facilitative factors, it follows that

the child will experience more family cohesion and adaptability, indicative of dyadic progression.

Although the primary focus of the study is on the adolescent, an analysis of parent responses will be included to discern whether there were corresponding changes in family cohesion, adaptability, dyadic formations and in the career maturity from the parents' perspective.

Although these two hypotheses are separate, they are conceived in the design of the program as mutually supportive. Following Bronfenbrenner (1979), it is assumed that if a dyad manifests more reciprocity, balance of power, mutual feelings of warmth, and togetherness on a common task, then the developmental impact of the dyad will be greater. Conversely, if the tasks posed increase in complexity, there will be a greater career developmental impact. Through instruction and task design, the program was framed to stimulate both dyadic progression and career development in an integrative fashion. The complex and personal nature of the workbook tasks invite those qualities (paying attention, reciprocity, and mutual balance of power) that facilitate dyadic progression. In turn, a higher level of dyadic formation will likely improve the quality with which workbook tasks are completed.

CHAPTER THREE

METHODOLOGY

Design

A two group pretest - posttest experimental design was employed to study the effects of the Parent Counselling Program (Cochran & Amundson, 1984). The CDI, FACES, and the Self-Report Questionnaire were administered to the students in the Experimental and the Wait-Listed Control Group before and after the program. FACES and the Self-Report Questionnaire were administered to the parents of both groups before and after the program.

The families were asked to complete the program within a four-week time period, from May 16 - June 14. After the program was completed, and the scores tabulated, the two families that had shown the greatest increase in raw scores in all measures, the two that had little or no change, and two that had lower posttest scores were interviewed in person. The other families were interviewed by telephone.

	Pretests	4 week Intervention	Posttests
Experimental Group	CDI FACES Questionnaire	Parent career counselling program	CDI FACES Questionnaire
Control Group	CDI FACES Questionnaire	(Wait-listed; No placebo)	CDI FACES Questionnaire

Sample

Forty volunteer families with children in grade ten or eleven participated in the study. They were solicited from five different schools in the Lower Mainland. Each school was represented by eight families, four Experimental and four Control. Table 1 describes the sample for each school,

Table 1

Description of Sample Within Schools

School	Gender				Grade			
	Experimental		Control		Experimental		Control	
	M	F	M	F	10	11	10	11
A	3	1	1	3	2	2	2	2
B	1	3	2	2	1	3	3	1
C	2	2	1	3	3	1	1	3
D	1	3	2	2	1	3	3	1
E	1	3	2	2	2	2	2	2
Total	8	12	8	12	9	11	11	9
Parent	8	12	7	13				

School A is situated in a lower middle class district in which fishing is the predominant industry. Absenteeism is high during May and September because students are expected to help with the fishing. Motivation for high achievement is not as high as in

School D and E because many students take over the family business.

School B is located in a middle class rural area. A large proportion of the families in this area farm for a living. The school has a rural-like atmosphere. Extra curricular activities do not play as significant a role as in other schools because most students are bused. Counsellors report that parents place an important value on education and the work ethic.

School C is situated in a very affluent area consisting of many business entrepreneurs and professionals. Parents have high expectations of their children in regard to school achievement.

School D is located in a lower economic region where many parents are laborers. Counsellors reported noticing the effects of recent parental unemployment.

School E is in an area where families represent a moderately high income level. The school is four years old and the suburb is relatively new. Families consist of semi-professionals and professionals. This was the only school that had an active parent-teacher group.

Treatment

In each of the schools, the families (1 parent and 1 child in grade ten or eleven) were randomly assigned to the Experimental or Control group. Each group

consisted of twenty families. Counsellors of the students met with the groups to explain the purpose of the program (to help the child with his or her career planning). These counsellors were from the students' schools. All of the counsellors had completed master's degrees in counselling psychology at the University of British Columbia.

The counsellors informed the parents about the Manual for Parents (Cochran, 1985) which would take them through a self-guided step-by-step procedure in helping their child with career planning. The Manual is found in Appendix A. If they encountered any problems, they were asked to refer to this manual before they telephoned the counsellor. The subjects were also told that they would be interviewed by telephone to determine how the program went and that a selected number of them would be asked to do an in-depth interview to give feedback and recommendations. Before they were issued the program manual, the families were asked to fill out the CDI (students only), FACES and the Self-Report Questionnaire (students and parents). These were used as the pretest measures for the study. The Experimental Group was given the program and was told they would have four weeks to complete it. The Control Group was told they would receive the program in four weeks time, after the first group completed theirs.

When the program was completed, the families met as a group (Experimental) to take the CDI (students), FACES and The Self-Report Questionnaire (students and parents). They were once again informed that they would be interviewed when the analysis was done.

The Control Group met the next evening. The CDI, FACES and the Questionnaire were administered and the program was distributed. The counsellor explained the program and asked the parents to call if they had any difficulties.

After the data were analyzed, the families were ranked according to scores based on the pre-post measures. The two highest, the two lowest, and two middle ranking families were interviewed by the investigator to get a narrative description of how the program went and how it was of benefit to them. This enabled the researcher to better determine what facilitated or hindered change in career maturity and family cohesion and adaptability. The interviews allowed the families to state their experiences of doing the program in their own words. The remaining parents involved in the experimental part of the study were telephoned to determine how the program went and if there were any difficulties with the program. A copy of the questions, asked in the interview, appears in Appendix J.

Instrumentation

a. Career Development Inventory = School Form (CDI)

The Career Development Inventory (Super, Thompson, Lindeman, Jordaan, & Myers, 1980) is an objective multifactor, 120 item, self-administering inventory measuring vocational maturity in adolescents. A detailed description of the factors measuring career maturity can be found in the CDI User's Manual (Super et al., 1979).

The reliability data for the CDI were obtained by using the test-retest method, measuring stability of a response over a two or four week interval. It was determined from the responses of 1381 male and female students in grades ten, eleven and twelve. Reliability for the Career Planning Scale was $r = 0.85$ to 0.90 ; Career Exploration Scale was $r = 0.75$ to 0.81 ; Decision Making Scale was $r = 0.58$ to 0.71 ; and Work World Scale was $r = 0.77$ to 0.87 . Internal consistency is gauged by the alpha statistic and ranges from $r = 0.79$ to 0.88 for the scales, but is strongest for the combined score (Career Orientation Total) ranging from $r = 0.82$ to 0.87 . The Career Orientation Total (COT) is used as a global measure of career development and is used in this study.

The CDI was correlated with four variables to confirm construct validity. These variables were: 1) socioeconomic level of father's occupation, 2) a self-

rating of the student's vocational preference level, 3) aptitude as measured by the SRV-Verbal Test, and 4) the grade point average for ninth grade courses. Correlations ranged from .15 to .59 and were statistically significant at the $p < .05$ or the $p < .01$ levels. Career Orientation Total did not correlate with social status and school achievement (Super et al., 1979).

While the user's manual for the CDI does not report the intercorrelations among the four subscales that make up the overall COT scale, it does report the results of several factor analyses. For separate studies of males and females in different levels of education (grade nine to fourth year of university), the factor structure is consistent. Using a principal components analysis with varimax rotation, two factors emerge, one which combines career planning and career exploration and one which combines decision making and world of work information. The first factor is attitudinal while the second is cognitive, according to the theory and supportive evidence. When combined into a total score, the CDI provides a general composite measure of career development which has a high degree of internal consistency and stability up to six months.

b. Family Adaptability and Cohesion Evaluation Scales (FACES)

The Family Adaptability and Cohesion Evaluation Scales (Olson, Bell, & Portner, 1978) is a self-report instrument that addresses two dimensions of family functioning: cohesion and adaptability. It measures perception of one's family environment. Of the 111 multiple choice items, 54 items relate to Cohesion, 42 to Adaptability, and 15 to Social Desirability. Social Desirability was incorporated to monitor the extent to which individuals may be "faking good" when responding. Subjects answer each item on the basis of its applicability to their family using a four point scale from 1 = "true none of the time", to 4 = "true all of the time".

Low adaptability scores indicate a family situation which is resistant to change. High adaptability scores represent a chaotic home environment where instability prevails. Low scores on the cohesion dimension suggest a disengaged environment characterized by distant relationships between members. High scores indicate a family environment where relationships among members are excessively high (Olson et al., 1978). The model proposes that a balanced level of both cohesion and adaptability is most functional to family development.

Sixteen family types are identified using the scores as shown in Figure 1.

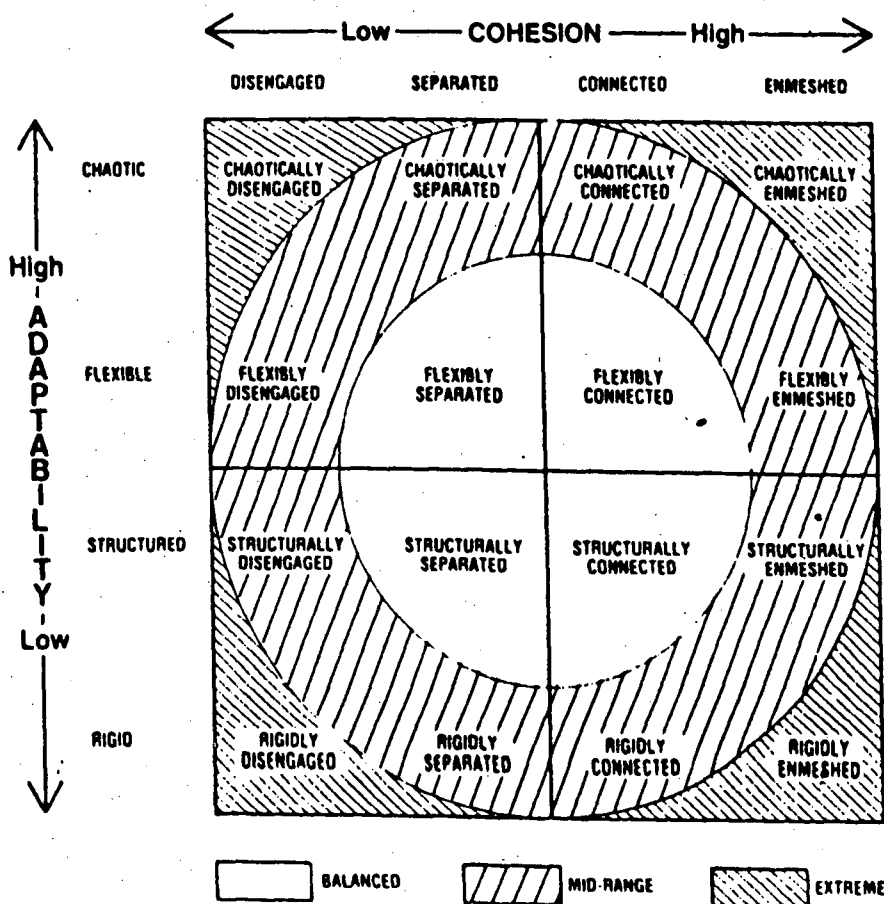


Figure 1. Circumplex Model: Sixteen types of marital and family systems (Barnes and Olson, 1985, p. 440).

Four balanced family types represent more functional family systems: flexible separateness, flexible connectedness, structured connectedness, and structured separateness. These open systems are distinguished by the ability of the individuals to experience and balance extremes of being independent and being connected to families.

The internal consistency (alpha) of the total scores for adaptability and cohesion is $r = 0.75$ and $r = 0.83$ respectively. Split half reliabilities were very low, and the authors of the measure caution against using partial scores in the form of subscales, recommending instead, the use of total scores.

Student/Parent Questionnaire

These instruments were constructed to obtain information primarily designed to describe the research sample and to obtain additional data to be used for control and analytical purposes. The questions addressed the dyadic formation changes (as they relate to Bronfenbrenner's theory) and the career related behaviors (as they relate to Super's model of career maturity). The dyadic formation questions included the four necessary conditions for moving to a primary dyad, namely: paying attention to each other, striving for reciprocity, striving for a mutual balance of power, and creating a warm atmosphere. The other questions pertained to Super's career related behaviors which relate to task accomplishment in career development. These included: career planning, career exploration, decision making skills and knowledge of the work world.

These questions were presented in a Likert-type response format which took about 5 - 10 minutes to complete.

An item and reliability analysis using the LERTAP Program (Nelson, 1978) was conducted on the questions to judge discrimination of items and determine internal consistency. Copies of the questions are found in Appendices H and I.

The Interview

The investigator interviewed each family to determine the effectiveness of the program from their own viewpoints. This was conducted to augment the quantitative part of the study. The purpose was to ask open ended questions to enable the families to give concrete examples of the changes brought out by the quantitative variables.

Six parents were interviewed in person; the others were interviewed by telephone. The six families chosen for indepth, in person interviews included: two parent-child dyads showing the highest gains in the pretest and posttest measures, two showing little or no change in these measures and two showing scores lower in the posttest than in the pretest measures. Although the child in each family was interviewed, the major portion of the feedback used in the study came from the parent.

To allow ample opportunity for positive as well as negative comments, the investigator spoke very little other than to assure the family that whatever they had to say was important. The investigator posed the question and asked for more details. The parents were asked to define their experiences, in their own words, about the program and the progress they made. These interviews took approximately one hour to complete. The telephone interview involved asking the parents questions and hand recording their remarks verbatim. These interviews took approximately fifteen minutes to complete. A copy of the questions used for both interviews can be found in Appendix J.

Analysis of Data

The data were analysed in two ways. First, the quantitative data were analysed using a multivariate analysis of variance. Next, data gathered through interviews were analyzed according to content.

Using the pretest and posttest scores of the dependent variables: FACES, CDI, and the Questionnaire, a multivariate analysis of variance (SPSS Program) was used to test the program for significant differences between the experimental and control groups. ANOVA, using the same SPSS program, was used for univariate tests of

significance. Prior to this analysis, the reliability of variables was assessed in two ways. First, the Questionnaire of dyadic formation and career maturity was subjected to item analysis, using the LERTAP computer program (Nelson, 1978). Among other things, this program provides a distribution of responses for each item, along with item means and standard deviations, that allow each item to be checked for adequacy of discrimination. LERTAP provides a correlation of each item with the test total (both with and without the correlated item). In this way, the relevance of each item to the test total can be assessed. Second, the program calculates a Hoyt estimate of reliability for the set of test items, providing a measure of internal consistency. Using the control group only, pretest scores were correlated with posttest scores for each variable separately. These correlates indicate test-retest reliability or the extent to which scores were stable over time. While adequate reliability has already been reported for FACES and the CDI, it is still valuable to check stability. However, the Questionnaire is a new instrument and evidence for reliability is more crucial.

The personal interviews were tape recorded and transcribed. The transcripts were analysed and

classified according to the categories of career awareness, self awareness, decision making, paying attention, striving for reciprocity, mutual balance of power, and providing a warm atmosphere. The questionnaire was constructed to consider as much as possible the constructs which arise from Super's (1957) model of career development and Bronfenbrenner's (1979) model of dyadic formations. Quotes from each family appear after each category. The same procedure was used for the families interviewed by telephone except that the results were summarized and only responses representing a minimum of four families were used.

CHAPTER FOUR

RESULTS

The interviews with parents determined whether or not each dyad completed the workbooks. This was checked in two ways. First, each parent indicated whether the program was completed. Second, from answers to questions, it was possible to judge whether each dyad had completed the program. That is, they were asked to report experiences that they could only have had if they completed all three workbooks. A sample of workbooks was also examined to see how the tasks were done. From these interviews, it was concluded that all twenty families had finished the program. On the average, dyads devoted about 12 hours to the program, with the range from 5 to 21 hours. Further, all parents found the tasks to be clear and easy to follow. No families telephoned the counsellor for assistance during the program.

Quantitative Analysis

The main thrust of this study was to investigate the effects of the Cochran and Amundson (1984) parent guidance program on career maturity and perceptions of family cohesion and adaptability of adolescent students. The hypotheses were tested using a multivariate analysis of variance (MANOVA). Since there are several dependent measures, univariate tests of significance would be inappropriate for at least two reasons. First, as the number

of tests increase, there is danger that some tests will be significant by chance. Second, univariate analysis neglects the interrelation among dependent variables. For these reasons, a multivariate analysis of variance with repeated measures is preferable. Classification (between groups) variables included treatment, school, and sex. The dependent measures included family cohesion and family adaptability of FACES, the career orientation total of the CDI, the career maturity items of the questionnaire, and the dyadic relationship items of the questionnaire. These measures were repeated over time. Multivariate hypotheses were tested, using Hotelling's T^2 statistic.

Item Analysis

Prior to hypothesis testing, an item analysis was conducted upon the 7-item questionnaire (Appendix H & I). For this analysis, 160 completed questionnaires were used, composed of 40 pretests and 40 posttests for parents and the same number for their children. The item means ranged from 3.01 to 3.69 with standard deviations ranging from .90 to 1.11, indicating that each item is reasonably discriminative and that no item is excessively biased toward extreme response. A Hoyt estimate of reliability for these seven items is .83. Item correlations with the test total ranged from .58 to .79. In summary, the questionnaire manifested an acceptable degree of internal consistency using a conventional standard of .8.

Stability

To estimate the stability or test-retest reliabilities of variables, the pretest and posttest scores for the control group were correlated for each variable separately. The correlations were .787 for adaptability, .895 for cohesion, .931 for COT (Total Score for the CDI), .883 for career items of the Questionnaire, and .948 for dyadic items of the Questionnaire. While correlations of .6 are generally acceptable for experimental studies, correlations over .8 are usually required for test construction (Nunnally, 1967). As the correlations indicate, four variables showed satisfactory stability. Adaptability, although less than .8 approached a satisfactory level of .787 which is still acceptable for experimental purposes.

An Assessment of the FACES Scales

As indicated earlier, the extremes of the FACES scales are regarded as problematic. Desirable changes take place with the middle range of scores. In this study, desirable change on the topic of a child's career development involved stronger bonding which Olson (1979) termed "connected family functioning", and more adaptability which Olson termed "flexible family functioning". Consequently before an analysis could be undertaken, the range of scores were checked to determine that change took place within the middle range of the model rather than in the extremes.

As can be seen in Appendix P, the adolescent scores were largely within the middle range. In no case did a person score at the extremes of chaos or enmeshment. Parent pretest scores tended to fall within the middle range on cohesion, but many were extremely low on adaptability, as can be seen in Appendix Q. However, in no case did parents scores move to the extremes of chaos or enmeshment on the posttest.

Multivariate Analysis

A multivariate analysis of variance (MANOVA) was conducted on the dependent measures, yielding a significant effect (Table 2) for groups over time, $F(5,16) = 9.38$, $p < .01$. That is, a linear combination of dependent variables indicates that the experimental group made significant gains (Figure 2) in comparison to the control group. To examine this effect further, univariate tests of significance (Table 3) were conducted using an ANOVA with repeated measures. Family adaptability showed no significant difference; however, there were significant differences for family cohesion, career maturity, career items and dyadic items of the questionnaire.

The experimental group manifested significant gains on four of the five variables, in comparison to the control group (Figure 2). For the dependent variable FACES (Family Cohesion), Figure 2.a shows the Control group with a decline of 3 points and the Experimental group with an

increase of 5 points. The Career Maturity (Figure 2.c) items of the questionnaire produced similar slopes whereby the Control Group declined 2 points and the Experimental Group rose 2 points. The items on dyadic bonding of the questionnaire (Figure 2.d) indicate a slight decline of one point for the Experimental Group and an increase of 5 points for the Control Group. The Career Orientation Total of the CDI (Figure 2.e) shows an increase of 6 points for the Control Group and an increase of 18 points for the Experimental Group. According to the norms for 12th grade students, this gain is substantial; a change from the 25th to the 55th percentile. Compared to the norms stated in the manual, the pretest means differed by .3. The mean of the pretest scores of the experimental and the control group was 102.9, compared to the norm of 102.6 of the same age group.

The school effects were examined using a multivariate analysis to determine the interaction with time, sex and treatment. Only one interaction (school by time) was significant (Appendix K). Since no univariate test of this interaction was significant, its meaning is not clear. There seems to be a tendency for students in one school to generally improve more than students in other schools, apart from the treatment related changes. This could be due to inherent counselling program differences among the schools, or to other unknown factors. There were no other significant

Table 2

Summary of Multivariate Tests on Students' Scores

Source	DF	T ²	Probability
Between Groups			
Treatment (T)	5,16	1.19	.36
School (S)	20,58	1.11	.37
Gender (G)	5,16	.82	.56
T X S	20,58	1.02	.45
T X G	5,16	.91	.50
S X G	20,58	.61	.89
T X S X G	20,58	1.04	.44
Person (T,S,G)			
Within Groups (Occasion(O))			
O X T	5,16	9.38	.001
O X S	20,58	1.76	.05
O X G	5,16	.79	.57
O X T X S	20,58	1.44	.14
O X T X G	5,16	2.62	.07
O X S X G	20,58	.98	.49
O X T X S X G	20,58	.80	.71
O X Person (T,S,G)			

Note: Dependent measures include: FACES (Cohesion), FACES (Adaptability), CDI (COT), Questionnaire on Dyadic Formations and Career Maturity.

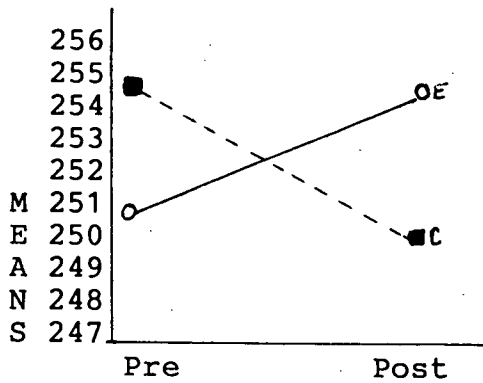
Table 3

Summary of Univariate Tests on Students' Scores for
Occasion by Treatment (O X T)

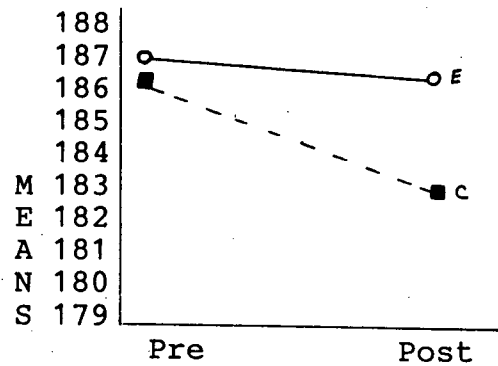
<u>Dependent Variable</u>	<u>DF</u>	<u>F</u>	<u>Probability</u>
FACES (Family Adaptability)	1,20	1.02	.324
FACES (Family Cohesion)	1,20	5.81	.026
QUESTIONNAIRE (Career Maturity)	1,20	5.63	.028
QUESTIONNAIRE (Dyadic Formation)	1,20	14.56	.001
CDI (Career Orientation Total)	1,20	23.21	.001

Treatment Effect on Students of the Outcome Variables

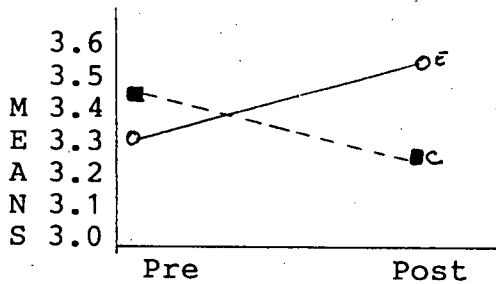
2.a FACES (Cohesion)



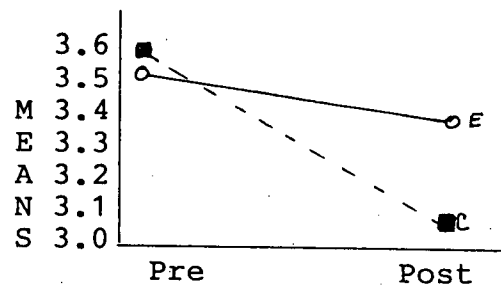
2.b FACES (Adaptability)



2.c QUESTIONNAIRE (Career Maturity)



2.d QUESTIONNAIRE (Dyadic Formations)



2.e CDI (Career Orientation Total)

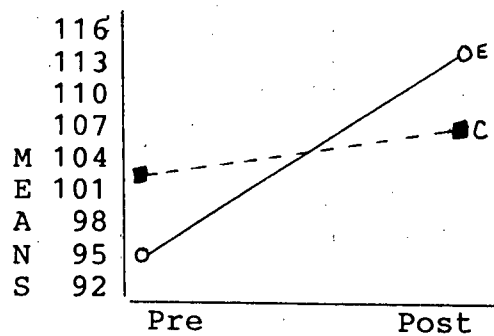


Figure 2

Table 4

Summary of Means and Standard Deviations of Dependent
Variables

<u>Group</u>	<u>FC</u>	<u>FA</u>	<u>Q.CMat</u>	<u>Q.Dyad</u>	<u>CDI</u>
<u>Experimental</u>					
PRE: Mean	251.4	186.9	3.33	3.52	95.2
SD	15.5	14.2	.87	.83	16.6
POST: Mean	254.3	185.5	3.51	3.42	113.2
SD	17.9	15.0	.79	.86	16.8
<u>Control</u>					
PRE: Mean	254.6	186.1	3.40	3.58	100.6
SD	20.6	14.6	.77	.95	16.8
POST: Mean	249.3	182.3	3.20	3.03	106.8
SD	23.6	14.2	.74	.91	14.9

Note: Abbreviations: FC = FACES (Cohesion), FA = FACES (Adaptability), Q.CMat = Questionnaire on Career Maturity, Q.Dyad = Questionnaire on Dyadic Formation, CDI = Career Development Inventory (Career Orientation Total).

interaction effects involving schools.

In summary, the difference in scores is largely attributable to the improvement over time of the experimental group. This effect is generally not dependent upon school or sex, or on higher order interactions. Significant improvement was found for family cohesion, career maturity, career maturity items of the questionnaire, and dyadic relationship items of the questionnaire.

As a secondary exploration, a multivariate analysis of variance was conducted upon parent pretest and posttest scores, including family adaptability and cohesion, dyadic formation items, and career maturity items from the Questionnaire (Appendix L). Using Hotelling's test, a linear combination of these dependent variables indicates that the experimental group made significant gains in comparison to the control group, $T^2(4,27) = 3.00$, $p < .05$. To examine this effect further, univariate tests were conducted using an ANOVA with repeated measures (Appendix M). Once again, family adaptability showed no significant difference. Change in family cohesion and dyadic formation approached significance, while change on the perceived career maturity of their children reached significance (Appendix N). Generally, the results tend to parallel those examined previously, although parents indicated weaker change on cohesion and dyadic formation, and stronger change on career

maturity. A summary of group means and standard deviations and a classification of parent and child according to the Circumplex model of family systems is found in Appendices O, P, and Q.

Qualitative Analysis

The parental comments during the interviews indicate strengths in the program that support and enrich the quantitative results. These comments provide insight into the effectiveness of the program on the adolescent. The program was aimed at the child and the parent in the home; therefore participant observation was not feasible. A structured retrieval of information was necessary to better understand what facilitated the results of the quantitative portion of the study. Hence, the analysis was based on the theoretical orientations of Super's (1957) career maturity model and Bronfenbrenner's (1979) model of dyadic formation.

Of a secondary nature, the following two comments were expressed. Of 20 parents, 14 reported they disliked doing FACES. They reported the content of questionnaire was an intrusion into their privacy and that answers could depend on moods. Twelve parents indicated the four-week time factor allowed for the program and the time of year was an impediment. The time of year chosen to do the program was a very busy one with final exams and summer holidays approaching.

Indepth Interviews with Six Families.

The personal interviews were conducted in the home of each family. Each interview lasted approximately one hour. Although each family was unique, the feedback was categorized into specific areas. Family 1 and 2 (Type One) represent the dyads with the largest change; 3 and 4 (Type Two) represent the dyads with little or no change; and 5 and 6 (Type Three) represent those dyads whose posttest scores were lower than the pretest ones. The adolescents' scores on FACES which categorizes the family type for each of these six families are shown in Table 5.

Table 5

Adolescent Faces Scores Classified According to the Circumplex Model

<u>Family</u>		<u>Category</u>	<u>Adaptability</u>	<u>Cohesion</u>
T Y P E 1	1 Pre:	S-D	184	230
	Post:	S-S	207	265
2	Pre:	S-S	187	240
	Post:	S-S	208	265
T Y P E 3	3 Pre:	S-S	185	243
	Post:	S-S	187	248
E 4	Pre:	S-S	201	237
	Post:	S-S	206	240
T Y P E 5	5 Pre:	S-D	184	230
	Post:	R-D	168	220
E 6	Pre:	R-D	181	199
	Post:	R-D	164	179

Note: Abbreviations: S-D: Structurally-Disengaged, S-S: Structurally-Separated, R-D: Rigidly-Disengaged.

To convey the quality of experience relevant to each category, direct quotes will be used. Following this representative selection of interview comments, general trends will be identified.

Career Awareness

All the parents involved in the program indicated their child showed an heightened career awareness which allowed them to act in more realistic ways.

(a) Type One Dyad

Parent One: "Before the program, G. lived in a fantasy world. He loves directing, writing and acting. The program helped him be realistic enough to know that maybe you can't make much money that way so we won't exclude doctor or lawyer. At this moment he realizes he has a lot of opportunities open to him."

Parent Two: "J. had no plans at all before the program. I think he is a little closer to knowing what he wants to do. He is now talking about going to university and sees that as a necessity."

(b) Type Two Dyad

Parent Three: "It seemed S. had too many things on her plate, so we really had to seriously think this through and narrow down some areas. The program started her thinking seriously in two directions, namely sports and helping others."

Parent Four: "She is certainly thinking about careers."

For example, take an activity and pick out the strengths, well, she just assumed what they are but to define them on paper was different. This would lead her to thinking about what I am good at and what I might do."

(c) Type Three Dyad

Parent Five: "This is the first time she is telling me what she wants to do. At least now she is thinking about finishing school first. At least I got her thinking about the future."

Parent Six: "He was totally unaware of what the real world is really like but I honestly believe M. is starting to formulate some theories about life because he knows he has to support himself when he is finished grade twelve."

The gains made differed for each adolescent. For example, two began more realistic planning, one began planning for university, one narrowed several options to two, one related strengths and abilities to career options, and one began planning for next term. These comments support the quantitative part of the study which measured aspects of career maturity (career awareness) using the CDI.

Self Awareness

Five parents reported an increase in self awareness of their child.

(a) Type One Dyad

Parent One: "G. now knows a great deal about his interests. The program brought home to him that he does live

in a fantasy world. He knows his strengths but it was good to discuss them. His strengths and values were things like courage, determination, pride. For a grade ten that is really quite something."

Parent Two: "He learned he is a very social person. He certainly knows what he is looking for in an everyday work situation. He has a better idea of the kind of life style he wants."

(b) Type Two Dyad

Parent Three: "S. is a very aware person. She discovered her strengths and has become aware of what is important to her. The program confirmed to her that she was good in a lot of areas and why she was good in them."

Parent Four: "She did realize she has strengths in certain areas. She is a good listener and she didn't recognize this until we did the activities."

(c) Type Three Dyad

Parent Five: "She finally saw herself in a positive light. She could see she wasn't this bad egg. She has a lot of friends so she is a likeable girl."

Parent Six: " He doesn't seem to have any goals past the next meal. As his mother, I would say he doesn't know himself at all."

Given the individual situations, the program helped five adolescents make a connection between self awareness

and implementation of a career. Family One saw the child no longer living in a fantasy world, Family Two realized the central feature of sociability as a necessary aspect for the life style the student wanted. For Families Three and Four, the program confirmed or made aware the strengths the adolescents had. For Family Five, the program helped the child see herself in a more positive light which made her more capable of making a realistic self appraisal. Family Six reported the child did not know himself at all. The comments provided by the parents support the quantitative part of the study measuring the self awareness aspect of career maturity in the questionnaire.

Decision Making

Family Types One and Two reported they had greater confidence in the ability of their child to make a better career decision.

(a) Type One Dyad

Parent One: "It is too early for him to make any final career decisions. I think when the time comes for him to do this, he will make a good one because he will have the know-how and will see to it that the career he chooses will offer him what he wants."

Parent Two: "He now has a clearer idea of what it takes to plan a career. I am sure that he is capable of saying at this point that this is what I am going to do. He is better equipped to make a decision now."

(b) Type Two Dyad

Parent Three: "I feel fairly confident that she is capable of making a good decision. She has a good head on her shoulders. She has a tremendous amount of commitment and determination. She wouldn't do anything without giving it a lot of thought."

Parent Four: "Let's take French. It was her decision to take it in summer school, not mine. She knows she needs it to keep her options open. I told her she can use this process in the future when she makes decisions."

(c) Type Three Dyad

Parent Five: "She isn't ready to make a decision yet. I hope she will grow up more next year. I don't think she cares about much right now."

Parent Six: "Not major decisions of any kind. I don't think that he is mature enough to make any decisions for himself and what he should be doing."

The quotes representing Type One and Type Two dyads provide a more concrete basis for the gains exemplified in the CDI.

Dyadic Formations(1) Paying Attention:

The comments of each parent indicated there were more enduring feelings between the parent and child in four of six families. Parents were made aware of several

characteristics of the relationship by paying more attention to the child. For example:

(a) Type One Dyad

Parent One: "I feel closer to him somehow. I guess we are finally relating as adults. His values made me realize how mature and deep thinking he is."

Parent Two: "I can talk to him about everything. G. is very open and takes our suggestions as well as we always hear him out. It has impressed me that he is a very likeable kid and I trust him."

(b) Type Two Dyad

Parent Three: "With S. I have a particularly close relationship because she is just such a pleasant person to be around."

Parent Four: "Doing a program such as this just makes me realize I like her a lot more as a person."

(c) Type Three Dyad

Parent Five: "She just won't listen."

Parent Six: "When he is in a good mood, if I have anything to say he will listen. Our relationship used to be very good."

(2) Mutual Balance of Power and Reciprocity:

Bronfenbrenner (1979) defines reciprocity in a dyad with a particular emphasis upon the coordination of activities between two dyad members. Reciprocity refers to

reaction in kind as each gives and takes. However, Bronfenbrenner also stresses that the ways A responds to B might differ from the way B responds to A in order to coordinate or participate with one another. While reciprocity might be negative (A requests while B refuses, B's refusal leads to A's anger), Bronfenbrenner's concern is positive responses or efforts to coordinate in a productive way on a joint task. Balance of power concerns the relative influence of one member of a dyad on another. A might influence B more than B influences A. As dyads progress, Bronfenbrenner assumes that the developmental impact of a relation is heightened by a movement toward a more mutual balance of power or one that shifts in favor of the developing person. In the examples below, a quote may indicate more than one facilitative factor. For example, warmth is present as well as reciprocity.

(a) Type One Dyad

Parent One: "We would like him to lead a comfortable life style but you can't lay that on. It has to come from him and it is. I found out I could trust him. I liked helping my son with the program. He was pleased I took an interest in him."

Parent Two: "We try not to influence him to our way of thinking but we try to encourage him and help him. We have always been open but it really showed now. We try not to

pooh-pooh him and he appreciates it."

(b) Type Two Dyad

Parent Three: " She would never discard what we have to say. We are very open with each other. We are very open to what our children have to say and encourage input in all areas. In turn, they know they can trust us."

Parent Four: "I never thought about things she valued, so this was a perfect opportunity to learn about her as I helped her. She took pride in teaching me. What she didn't like about the program, she didn't take out on me but kept it as an issue we would both deal with. We really do things jointly."

(c) Type Three Dyad

Parent Five: "I wish we got along better. Nothing I do seems to satisfy her. Whenever I want to talk, she calls me old fashioned and won't listen."

Parent Six: "Those times (when he closes himself off from the rest) he will avoid me totally or comes and asks me something that he knows he can't have so that he can get mad and stomp out. This program was a perfect opportunity to do something with him that would benefit each of us and he just wouldn't cooperate."

(3) Warm Atmosphere:

Parents provided comments which indicated the closeness they experienced with their child. For example:

(a) Type One Dyad

Parent One: "We will talk about everything and anything. Because he is around a lot we talk about everything. His Dad takes him fishing or they go for a walk because his Dad is aware of the importance of being able to talk to each other."

Parent Two: "It was just showing him that we are really concerned in what he does and we are interested in him and his future. So I guess he realized that we weren't pushing him but were really trying to help him."

(b) Type Two Dyad

Parent Three: "We are a very close family and we do many things together as a family. We always attend every event our kids enter."

Parent Four: "When something goes wrong, we do function together. I have always said there is always a solution when things go wrong and we always find one."

(c) Type Three Dyad

Parent Five: "She says I am too old fashioned and too strict and too uptight."

Parent Six: "I can't tell one minute from the next what his mood will be. I try not to become too upset about it because he will grow out of it."

The two families that did not achieve warmth seemed to experience trouble in other areas as well. The interviews

indicated that Type One and Type Two dyads showed shifts in balance of power, mutual feelings of warmth, and togetherness. This supports the quantitative portion of the study measuring cohesion on FACES.

Benefits of the Program

There were several benefits of the program. All the parents indicated an increase in their child's self awareness, career awareness, and a more enduring relationship between them. Four of six parents reported their children were better able to make a career decision.

(a) Type One Dyad

Parent One: "Putting it down on paper really helped G realize how interested he is in the arts. His values made me realize how mature and deep thinking he is. We did the grid several times so that his choices were satisfactory to all his values."

Parent Two: "For the first time we were actually talking specifics. Putting the grid together and actually coming up with something concrete was exciting for J. I guess we learned that we have a son who is growing up and that he has done some thinking about going to university after grade 12."

(b) Type Two Dyad

Parent Three: "Doing the program in a structured way confirmed that S would definitely like to pursue a career in

sports. S. spent a lot of time in the career center trying to get information about the different types of jobs in this area and we are now talking to people who are involved in this area. The program started her thinking seriously in certain directions."

Parent Four: "We realized in doing this program that she needed French so she is going to take it in summer school. It couldn't have been more timely. The program made us focus in on something in an organized manner."

(c) Type Three Dyad

Parent Five: "For a change J. saw herself as being able to do something as okay. We talked about the courses she would take in grade 11. I actually went to the school to see the counsellor to see if I could get her into a cafeteria program next year."

Parent Six: "It was so discouraging for me. We just didn't get anywhere. It was far too lengthy to be of any benefit to us. At least we were able to discuss the interests and come up with the values. I intend to try this again with him next year."

The benefits were as varied as the number of family dyads. They ranged from planning next term's courses, to making more realistic decisions, to raising the student's self esteem, to actual career identification. The comments chosen for the study represent just a few examples of what

the parents reported. However, the majority of the comments support the first part of the study which indicated an increase in adolescent career maturity, and perceptions of family cohesion and dyadic formation.

Telephone Interviews

The fourteen parents interviewed by telephone were asked specific questions concerning the program. Although a variety of responses was given, the same categories as those of the indepth interviews emerged. The responses support the quantitative part of the study and the reports of the six parents who were interviewed in person.

Career Awareness

Thirteen parents indicated the child was more aware of career and options available. The high rate of positive responses may reflect the high motivation to do the program. Comments from different parents support this:

"For a fifteen year old she certainly seems to know what she wants to do."

"The program made her come up with a career plan. Prior to this she kept putting it off."

"We discussed all sorts of options she could follow."

"She now knows what she wants."

"He is beginning to think about careers more seriously."

Self Awareness

Nine parents indicated the child was more aware of his or her strengths, interests and values. Three families reported the child was too young to know him or herself. Two families reported there was no increase in the child's self awareness. Examples of quotes indicate the above.

"S. is certainly more aware of his strengths and weaknesses. Writing the values on paper formed a picture of himself."

"M. has confidence in her abilities to do well in fashion design."

"She certainly knows what she wants and how to go about getting this."

Decision Making

Ten parents reported they believed the child was better able to make a career decision after the program. Of these ten, five parents reported they thought the child was fairly capable, considering he or she was only in grade ten. Two parents were surprised at the very high level of career maturity of their child. The remaining two parents felt the child was not capable of making a career decision.

Some quotes follow:

"For her age, she is quite capable of making a decision. I would certainly trust her decision."

"I learned that K is more mature about her decisions

than I gave her credit for. She showed me that she could make a decision and why she made it."

"After the program, quite capable, but she still needs guidance about a final decision."

"The program made him understand what it takes to make a wise decision."

Dyadic Formations

Ten of fourteen parents reported the relationship between parent and child was good to very good prior to the program. Nine of these parents reported they had a very open relationship with each other. Five of these same parents said they made major decisions as a family and four parents reported they always try to encourage the child in whatever area he or she expresses an interest. The remaining four parents reported a fair to poor relationship. The program helped one mother realize the relationship with her daughter was not as good as she thought. She attributed this to a problem son whom she had been devoting all her attention to, and had just assumed things were well with the daughter. Another mother learned about a suicide attempt by the daughter's best friend prior to the program. The friend had informed the daughter of her plans and had sworn her to secrecy. The daughter was struggling with this at the time of the program.

The interviews indicated the majority of the dyads

experienced more reciprocity, a balance of power, increased mutual feelings of warmth and togetherness. This confirms the results of FACES used in the first part of the study. The quotes of the parents follow:

(a) Paying Attention:

Regarding paying attention, parents provided a wide range of observations and insights that indicated considerable attention. One parent recognized the "first breaking away" signs and realized "it was time." Another was impressed with the maturity of her son. Some were amazed and delighted while a few were more guarded, but all seemed to learn and confirm things through paying attention to their children during the program.

(b) Mutual Balance of Power and Reciprocity

As mentioned earlier, reciprocity can covary with mutuality of power so that parent comments often indicated reciprocity and mutuality in the same sentence. For example:

"We ask for input and respect each other's ideas. I teach her and she teaches me."

"We have always been able to talk to each other about any topic. I can say anything to him and of course he feels free to speak his mind to me."

"I would never make her choose a career she didn't want. I can help her choose but she has to decide."

"When my son realized his mother wasn't as stupid as he

thought, he really opened up. He saw I was trying to help him."

"We can both speak our minds and she is able to listen to what I have to say. It works the other way too."

In each of these cases, parent comments indicated more give and take, and more openness in communications about the child's career. Parent comments also indicated a shift in power towards the child, at least regarding career decision and planning. Rather than direct, parents sought to help, encourage, and support, often justifying their position by the confidence, trust, or faith they had in their child. Parents who do not shift toward a more mutual balance of power seem to lack this basic trust, which in turn seems to be often connected with a more problematic relationship.

(c) Warm Atmosphere:

Regarding warmth, parents ranged from effusive declarations of the closeness they experienced doing the program to more objective appraisals. For example, one parent openly declared she trusted her daughter totally. Another indicated all major decision were made as a group. Another used more general terms to denote warmth: "He is very mature, friendly and cooperative and this program reaffirmed that."

In perspective, mutual balance of power, paying attention and a warm atmosphere seem to cluster as part of a

more holistic experience. Parents who experience warmth in the family also achieve more mutuality of power.

Benefits of the Program

All the parents reported that the program helped their child in career planning. The benefits however, were varied. Four family dyads used the program to help the child choose courses for summer school or next term. Four dyads gathered more information about specific careers. Four adolescents explored other areas in addition to the preferred one. Three confirmed the areas the adolescent was interested in. In addition to the above, three felt the program helped them formulate career plans where there were none, and six parents said the grid helped their child decide on specific career areas.

"It gave us a good idea of what areas to pursue."

"The grid verified what his major career interests are."

"She is more aware of what it takes to be happy in a career."

"The program put things into perspective for us."

"If we wouldn't have done the program, he would have taken science instead of computer sciences next year. This wouldn't have fit with what he wants to take at university."

"We learned what is available at different universities."

"The grid confirmed to her what she wants to do and why."

"It made me realize I had to spend more time with her and give her more attention."

Summary

The indepth interviews conducted with the parents showed their child is now more aware of careers and the options available to him or her. Four of six parents reported an increase in child self awareness and four of six stated the child is better able to make a career decision. The two family dyads in the high scoring range reported very good relationships before, during and after the program. They were open to each other's needs and enjoyed time together. The dyads in the mid range also reported very good relationships. The little or no change indicated by the measures, resulted from the child knowing what he or she wanted to do prior to the program. This was confirmed as the parent and child worked on the program. Parent Five would like to see the relationship improved. Family Six was encountering some family problems at the time of the program which created a great deal of stress between mother and son.

The comments from the fourteen parents interviewed by telephone, indicated that there were benefits derived from the program. Although the comments varied, there seemed to be an increase in career awareness, self awareness, and decision making. This supports the results of the quantitative portion of the study which indicated a

significant improvement in career maturity.

The interviews indicated that relationships were good prior to the program indicating there may have been a joint activity dyad present in the family and that the program may have contributed to the formation of a primary dyad. This may have come about as each member of the dyad paid more attention to each other as they worked on the program. This in turn, may have contributed to creation of a warm atmosphere and a striving for mutual balance of power. By being open in a give and take way each member contributed in the relationship building process.

Clinical Assessment of Two Families

To gain some clinical insight into the different ways families might use the program, two families will be assessed. The first is classified as rigidly disengaged and made very little progress. The second is structurally disengaged and did make progress. The second family is more of an ideal case in which the parent-child dyad made considerable improvement. Although the parental comments are tentative and sometimes conjectural, they might provide some practical insight into family processes as they are manifested in completing the program. Perhaps the key issues involve what facilitated and what hindered progress in the program and whether there are important events that seem to make the difference.

The first family encountered many problems with the program. When making a clinical assessment, it is difficult to understand the family without understanding the major event which created upheaval. Prior to this event, the mother paid a great deal of attention to her son. She attended all his sports activities, went for a pizza with him once a week, and enjoyed having his friends at home. After knowing a man for four weeks, the man moved into the house without a formal role title as husband or stepfather. The son's reaction was one of rebelliousness and intense anger. The mother's attention was now diverted to her male friend. The son mistrusts his mother and the man. Since his arrival, there has been little or no reciprocity or openness in communication. The son feels as if he no longer counts in the home, with his mother having all the power. What had presumably been a warm relationship had turned into a very unstable one if not a cold one. Since the child objected to the man's appearance in the home, the mother became angry and refused to participate in and attend any more of the son's activities.

It was within this context that the program was conducted. The mother forced the son to sit through the program and had unrealistic expectations of how successful it would be. It was a constant struggle to get the son to work on the program. Her comments supports this:

"He would keep postponing it and he would think of all sorts of excuses. I would have to threaten him to do it."

The mother described her son as unmotivated, with no goals. He would not name realistic interests and claimed he did not like any activities except hockey. He did not enjoy school. He would always agree with his mother's suggestions so that she never knew if they were genuine. Her comment about the grid is illustrative:

"When the only thing you want to be is a playboy it is pretty difficult to come up with key considerations. Nobody is going to pay him for the things he likes to do."

In assessing what hindered the constructive use of the program, it became apparent that certain essential conditions of Bronfenbrenner's dyadic formations were not in place. There was no warmth, or mutuality. The mother no longer paid attention to her son. The basic conditions of trust and openness necessary for healthy family functioning were not evident. Bronfenbrenner's conditions of reciprocity and balance of power are key ingredients of Olson's dimension of adaptability. Warmth and paying attention are essential for cohesion. None of these core conditions necessary for effective communication were evident in this relationship.

The second family contrasted with the first in many ways. Family K. appeared to have a stable and warm

relationship. The parents were both involved in full time professional careers and the three children, all teenagers, were very active in school, sports and part time work. Any spare time was spent driving the children to their numerous events or attending to previous commitments. The family, however, always had dinner together to provide the opportunity to keep everyone up-to-date on what was happening. The father was very proud of his children because they were all "A" students and very athletic. He tried to attend as many of their functions as he had time for.

The daughter is a very bright student who was also involved in several sports activities. The atmosphere in the K home seemed warm and caring. The program forced the father and daughter to sit down as a unit and work together. Because they had made the commitment to the counsellor, they were prepared to carry it through. The time they spent together proved to be very rewarding and pleasant to both. The father's comments illustrate this:

"It was so much fun doing because we are always so busy with everyone doing their own thing. This forced us to sit down and work together - just the two of us."

This dyad went through the program without any major difficulties. The daughter was able to establish a career direction, something that had been bothering her for a long time. The father was amazed at how many interests the

daughter had and how many options were open to her. By paying attention, the father discovered some talents the daughter had and how very mature she was. He was very proud of her.

The daughter enjoyed the program because she realized her father was really interested in helping her and was pleased that she could have his undivided attention. The father had not realized the importance of this until they worked on the program.

In assessing what facilitated the constructive use of the program, it was apparent that the certain essential conditions for Bronfenbrenner's dyadic progression were in place. They paid more attention to each other and displayed mutuality in an open, warm atmosphere. As mentioned previously, these are also the core ingredients for Olson's dimensions of cohesion and adaptability. The openness and trust displayed by the dyad provided for effective communication.

CHAPTER FIVE

SUMMARY, IMPLICATIONS AND RECOMMENDATIONS

Summary

The purpose of the study was to determine the extent to which a program designed for parents to assist their children in career planning facilitates dyadic functioning and career development. The theoretical underpinnings of the program were Super's (1957) Career Development Theory and Bronfenbrenner's (1979) Theory of Dyadic Formations.

The study design used was an experimental design employing an experimental and a control group. Both groups were pretested and posttested during the course of the study. The treatment consisted of a program designed to assist parents in their child's career development. It was comprised of three separate modules or workbooks with each having a number of units. Each unit, structured and self explanatory, was completed by the parent and child cooperating to accomplish a particular career task.

The sample consisted of forty volunteer parent-child dyads from five schools in the Lower Mainland. Each school was represented by eight families: four experimental and four control. Each dyad had a child in grade ten or eleven. A four week time period was allowed for completing the treatment

portion of the study. Dyads in the experimental group were pretested with the Career Development Inventory (CDI) (Super et al., 1980), Family Adaptability and Cohesion Evaluation Scales (FACES) (Olson et al., 1978), and a Questionnaire designed by the investigator. After the pretests, the parent of each dyad was provided with the experimental program and posttested with the same measures. Subjects in the control group were pretested, waitlisted and then posttested during the same time period.

The CDI was chosen for obtaining pre and post measures of career maturity. It is a reliable instrument designed specifically to measure the career maturity of high school students. FACES was chosen to measure family functioning, namely adaptability and cohesion. A balanced degree of cohesion and adaptability is most functional to family development and studies show the instrument to be a reliable, objective one.

The parent of each dyad was interviewed to determine the effectiveness of the program from his or her own viewpoint. Six parents were interviewed in person and fourteen parents were interviewed by telephone.

A multivariate analysis of variance with repeated measures was used to determine whether the CDI, FACES and the Questionnaire scores of subjects in the experimental group and control group changed differentially. The following

hypotheses were tested with major findings presented for each.

1. If parents use the Cochran and Amundson (1984) program to work with their adolescent children, their adolescents will gain in career maturity, compared to adolescents not involved in the program, as measured by the CDI.

A multivariate analysis of variance (MANOVA) showed a significant treatment effect, $F(5,16) = 9.38, p < .01$. Using an ANOVA with repeated measures, univariate tests of significance were conducted on each dependent variable separately. Regarding career, the career maturity items of the Questionnaire showed a significant difference, $F(1,20) = 5.63, p < .05$, as did the CDI measure of career development, $F(1,20) = 23.21, p < .01$.

2. If parents and their adolescent children work together on the Cochran and Amundson (1984) program their adolescents will report gains in family cohesion and adaptability compared to adolescents not involved in the program, as measured by FACES.

Family adaptability showed no significant difference $F(1,20) = 1.02$. However, there were significant differences in family cohesion, $F(1,20) = 5.81, p < .05$, and in the Questionnaire items addressing the dyadic relationships, $(F1,20) = 14.56, p < .01$. However as Figure 2d indicates, the

significant difference on dyadic items was due to the drop manifested by the control group more than gains made by the experimental group.

The qualitative data extracted from the interviews confirmed the positive value of the program. The evidence strongly suggests that the program increased career awareness, self awareness, and career decision making. Feedback from the parents indicated that parents and their children learned more about each other which strengthened their relationship.

Within the general literature upon developmental career programs, the present program shares a number of similar features that might account for the impressive gain on the CDI. While there have been several reviews of effective principles, ranging from Bordin's (1979) working alliance to DeCharm's (1976) personal causation, the most relevant and thorough review was conducted by Blocher (1977). Blocher summarized seven core features of effective career development programs: involvement, challenge (tasks are neither too easy nor too difficult), support, structure (one has models of advanced functioning to accomplish tasks), feedback (information is provided on performance), application (the person has opportunity to apply knowledge and skills), and integration (through discussion, a person reflects on and integrates learning). In the present program,

involvement was facilitated by the personal nature of the task and by the co-involvement of a parent. The tasks can be accomplished, but to do well requires considerable thought and investment. In short, they are capable of being very challenging as the majority of the parents implied. Support was supplied in most cases by a warm atmosphere, a caring parent, and a clear set and sequence of tasks. If an advanced model of functioning was present, it would be the model set by parents. From parent interviews, it seems likely that many parents did provide models. Parents provided feedback. Also, feedback is built into some of the tasks. Rather than learn generally how to explore, decide or plan, the adolescents were guided to learn by doing. Last, most parents seemed to provide ample time for reflective discussions as the manual directed them to do. Although there were exceptions, the interviews supported the likelihood that adolescents experienced to a greater or lesser extent, many or possibly all of the core features Blocher has identified. If so, it appears that many parents are apt to be capable of becoming effective agents for their children's career development, when provided with a guided program.

In comparing the current study with that of Bearg (1979), both of which used the Career Development Inventory (Super et al., 1979), the current study showed a significant increase in career maturity whereas Bearg's did not. This may

have been partly due to differences in format of treatment. An analysis of Bearg's treatment indicated a less structured workshop format rather than the highly structured workbook format used in this study.

A comparison of the current study with school based programs show some similarities in CDI gains. McCulloch et al. (1985) show gains of 16 points whereas this study showed gains of 18 points for the experimental group. Both studies employed a significant other to explore careers. McCulloch et al. used peer counsellors as the significant other, this study used parents.

Yates's (1982) study shows gains of 70 points in the CDI scores. However, he used college students and the College Form of the CDI. This form consists of six parts rather than four used in this study. Similarities between the two studies show that both used undecided students ready to make a career decision. Yates used three weeks for the treatment portion of the study while this study used four weeks. The comparison of studies just cited indicates that vocational maturity can be affected positively if effective means of providing career development experiences are used.

Limitations of the Study

In general, the results indicate that young people who participated in the parent career guidance program showed improvement in career maturity and in strength of parental

bonding. However, this conclusion must be qualified by the nature of the sample.

First, the families who participated, were volunteers. They sought help in assisting their children in career planning. As the program is aimed for volunteers, this does not limit its planned use. However, no claim can be made that the families in this study adequately represent families in general. Consequently, generalization of results to non-volunteer groups would be unwarranted.

Second, all of the participating families were Caucasian, living in a North American urban culture. In future studies, it would be important to determine how the program works with families from other cultures as well as with families from rural areas. On the basis of present evidence, no generalization can be made.

Third, perhaps as a feature of volunteers, participant motivation tended to be high and parent-child relations tended to be reasonably good. There is some indication that families who are in conflict will not benefit or benefit as much. For example, one divorced mother discovered how strained her relationship with her child really was, and lack of cooperation dampened improvement. However, there are other instances in which difficulties of relationship were overcome and a working dyad was improved. Consequently, it cannot be asserted that parent-child relations must be good

to benefit from the program. Rather, strains in relationship are apt to present problems to be overcome if the program is to succeed. Further work will be necessary to be able to make adequate discriminations in this area.

Fourth, in interviewing parents, it became apparent that the measures employed in this study do not capture the full range of change produced in completing the program. For example, there are instances of improvement in student self-confidence. There were practical alterations such as changes in curriculum choices, taking a summer school course, and the like. There were many expressions to indicate that the parents and children regarded the working relationship as on-going rather than working within a time frame. While the measures capture major aspects of improvement, the full range of benefit requires further exploration.

The quantitative and qualitative measures show that the treatment produced significant differences in the experimental group. However, due to the non-observational nature of the study, specific processes that produce change cannot be determined. Participant observation is necessary to determine how the process of change came about.

Theoretical Implications

The results support the two central bases for the parent career counselling program (Cochran & Amundson, 1984). First, the results support in a general way Bronfenbrenner's (1979)

conception of dyadic formation. As partners in a dyad began to pay attention to one another and to do something together, there was an improvement in relationship, as indicated by FACES, the Questionnaire, and interviews. The features of a primary dyad appeared to be strengthened.

Second, the results support Super's (1957) view of developmental tasks. As a parent-child dyad worked together to accomplish career development tasks involving self awareness, career awareness, decision making, and planning, there was a significant improvement in career maturity. Important parts of career maturity appeared to be strengthened.

This study was not intended to test theoretical propositions. It used Bronfenbrenner's (1979) theory of dyadic formation and Super's (1957) theory of career development as bases of a program, instead of examining either directly. Consequently, support remains indirect and unspecific. More directly, the evidence supports a practical guidance intervention involving dyadic formation and career development tasks.

Practical Implications

The major implications of this study are practical. First, the study shows that parent involvement in a structured career guidance program can enhance the career development of their children. For decades, career

counselling has been largely defined as an activity conducted by a professional counsellor and a client. However, as the literature review indicated, school counsellors are often able or willing to devote only a small fraction of their time to career guidance (Lea, 1976, Trudeau-Brosseau, 1982). As a consequence, perhaps most students complete secondary school with just a preliminary orientation to work, and that is provided in large classes. Sustained individual attention is apt to be lacking. While parents do not supplant career counsellors in the experimental program, the study indicates that at least some aspects of career guidance can be returned to the family under appropriate conditions. From a counselling perspective, parents become a valuable resource for young people, a resource that can not only save professional time but also enhance the quality of guidance. From a parental perspective, counsellors become a valuable resource for supporting their efforts with tests, information, and other materials, and for consultation.

Second, a major practical difficulty is that career development takes place over time while career interventions either take place at a period of time or sporadically over time. A review of literature shows the more enduring source of support for youth making the transition into the adult world of work has been largely unexamined. As parents do provide support and are rather continuously present for

youth, ways to better equip parents to support or guide seems important. This study indicated that it is possible for parents to provide assistance and be more effective agents using a short term intervention. However, such interventions can facilitate the longterm career development of their children.

Third, is the guarded point that the study might have value in the field of family guidance. By guiding parent involvement in structured tasks with sons and daughters, there was a strengthening of the features of a primary dyad and measurable gains in family cohesion according to the perceptions of the adolescents. Paying attention to one another and working together on a common task, under certain conditions, influenced bonding, reciprocity and balance of power, all of which are important aspects of family guidance. It might also be noted that there was no significant improvement on family adaptability. Adaptability refers to the structure and organization of the family, particularly family rules. The parent's program (Cochran & Amundson, 1984) does not address this to the same degree as it does cohesion or bonding. Bronfenbrenner's dyadic progression depends upon cohesion more than adaptability. This warrants further investigation. More justifiably, the evidence supports the possibility of using structured tasks in family guidance to promote cohesion and to foster primary dyads.

Fourth, Olson's (1979) two scales are each divided into four regions. Combining these two scales results in 16 types of families (See Figure 1), a classification that is intended to help practitioners in working with families. While this typology has not been stressed in this study, it might be used as a basis for attempting to gain some clinical insight into the different ways families might use the present program.

Fifth, it appears that the core conditions necessary for effective communication: trust, openness, warmth, respect, reciprocity, and mutual balance of power are similar to the core conditions for Bronfenbrenner's dyadic progression as well as for adaptability and cohesion. Without these core conditions, the success of completing the program would diminish. Parents should be made aware of these conditions before doing the program. This would enable them to assess the relationship and improve upon the areas that would increase communication effectiveness and healthy family functioning.

Recommendations Future Research

1. This study opens up further avenues of inquiry. A next step would be to conduct a replication of the design to involve larger groups.

2. This study confined itself to adolescents of Caucasian families in urban areas. A similar study should be

conducted to determine if there is a differential effect of the program upon families of different cultural backgrounds and upon families living in rural areas.

3. If a program such as this stimulates significant positive interaction between parent and child, further research could determine if these interactions remain positive for extended periods of time.

4. Further research could be done to determine if a direct relationship exists between the stage of adolescent vocational development and the quality of communication patterns that exist in the family. The final stage of adolescence is particularly important in career decision making. Examining the quality of communication patterns occurring at this stage allows us to determine the quality of career choices; hence developing and further validating the theory underlying this process.

5. Further research could be done in which only the father or mother do the program with the child. It is possible that the involvement or distance of one parent is the more potent ingredient in career development.

6. Further research could be done which is more process oriented. This study indicates that the program had impact on the sample population. The next step would be to do a process analysis to determine how the impact occurs.

7. There are many potential intervening variables that

might affect program effectiveness. Two such variables are internal locus of control of parents and children (DeCharms, 1976) and socioeconomic status (Schulenberg et al., 1984). Future studies could investigate the relationship between internal locus of control, vocational maturity, and program effectiveness. An alternate approach might look more closely at the degree to which socioeconomic status of families affects vocational maturity and program efficacy. The review of literature (Mortimer, 1976, Schulenberg et al., 1984) suggests socioeconomic level can have considerable impact or influence on the career direction of the child and it is plausible to assume it might have an important influence on this program.

8. Expectations can play an important role in program development (Schoffner & Kleimer, 1973). One potential future study could compare the program with a placebo control group. At present, the extent to which these expectations affect outcomes is unknown.

Conclusions

A review of literature indicates that parents are perceived to be the most influential factor on career decisions of children. There are several innovative programs designed for parents in this area but research and evaluation concerning the effectiveness of these programs is scarce. Studies which show empirical data indicate mixed results.

This study attempted to determine whether a program for parents, designed to assist their child in a structured manner would increase career maturity and dyadic relationships. The results indicate that a program such as A Parent's Guide To Career Counselling (Cochran and Amundson, 1984) showed significant differences in career maturity and family cohesion. Based upon the results of the interviews, CDI and Faces, there appears to have been a positive improvement in family interaction around the topic of careers. However, further studies are needed to validate this. The information and skills listed in such programs may be helpful to parents whose patterns in the past have inhibited communication with their children. Students who expect to graduate need as much support as possible from their families in order to mitigate the feelings of uncertainty they may have concerning their transition from student to adult.

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APPENDIX A

Preliminary Qualitative Research: A Parent's Guide to Career Counselling.

Cochran, L. and Amundson, N. "A Parent's Guide to Career Counselling." Unpublished manuscript.

For further information, contact Dr. Larry R. Cochran, Department of Counselling Psychology, Counselling Psychology Building, 5780 Toronto Road, University of British Columbia, Vancouver, B.C., Canada V6T 1L2.

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For further information, contact Dr. Cochran at address given above.

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APPENDIX A

PRELIMINARY QUALITATIVE RESEARCH

A PARENT'S GUIDE TO CAREER COUNSELLING (Cochran
& Amundson, 1984)

An initial qualitative study employing a case study approach was conducted on five volunteer families with children in grade twelve to determine the impact of the program on career maturity and family relationships. The qualitative approach was chosen to enable the investigator to observe the reciprocities which exist within various relationships within the dyadic context. Twenty to twenty-five hours with each family were devoted to observation and discussion before, during and after the program. Each family was visited a minimum of five times and during each visit, interviews were conducted separately with the child and the parent, followed by an interview with both. 120-150 pages of typed script were collected for each family.

The pilot program consisted of structured exercises designed to help the student explore interests, aptitudes and values. The objectives of this program were to enhance parent communication patterns and recognize common communication problems, make parents aware of the problems one could encounter when making a career decision, explore interests in relation

to settings, values, abilities and personal characteristics, and explore jobs and their alternatives.

Parents and children were asked to comment on the chapters as they worked through them. After they were interviewed, the data was divided into two areas: dyadic relationships and career maturity. Although each family was unique, certain themes emerged. The pertinent findings of the study follow:

Career Awareness

The students showed different levels of career awareness. For example: after doing the grid, two students confirmed a previous career choice and one student narrowed the options to two from several alternatives. One student identified what career options were available, while one student came to the realization that an extra year of grade twelve would be necessary to fulfill career options.

Self Awareness

All families indicated that the adolescent became more aware of his or her strengths, interests and values and could now relate these to careers.

Career Decision Making

All five families felt the adolescent was better prepared to make a career decision and that the program made the student aware of the process of making a career decision.

Family Relationships

The program appeared to enhance or strengthen the relationships in all dyads. There is evidence that all family dyads paid more attention to each other. Even those encountering difficulties reported this. The family dyads indicated that there was a deepening of feelings toward each other as they worked on the program together. Overall, the impact of the program appeared beneficial. On the basis of the study, it appears the program was capable of promoting career development of the adolescent and of strengthening family cohesion and adaptability. However, a more extensive quantitative study seemed desirable to confirm the results. Although the impact of the program seemed beneficial, each family dyad member produced feedback on how the program could be improved. The critical feedback was summarized according to each chapter and provided to the authors. Upon the basis of this critical evaluation the program was changed in the following ways:

- 1) The program would be given to grade ten or eleven students.
- 2) A Parent's Manual was designed to describe the program and give step-by-step instructions for parents.
- 3) The introduction was shortened and rewritten in lay terms to make it concrete and practical.

4) Chapters Three and Five were deleted because the parents found them redundant and not essential in meeting program goals.

5) The exercises were streamlined to heighten interaction with less explanation.

6) The program was divided into three workbooks.

Present Structure of the Program

Based on the parental feedback, the program was divided into three workbooks and a Parent's Manual. The manual describes the objectives, structure of the program and specific ways parents can assist their child's career development. It covers the basic principles guiding involvement. Each of the workbooks has several units or tasks. An outline of each workbook follows with a detailed illustration of unit one:

1) Activities Self-Exploration Workbook. This may take 3-4 hours but parents are asked to take as much time as necessary to complete the tasks well.

Unit One: Enjoyable Activities.

The task is to make a list of ten general activities that the child enjoys. The list should "capture the broad scope of the child's interests (p.3)." The parent helps the child summarize a general type of activity (the authors use specific examples). Questions are listed that might help the parent guide the child. For

example: "What do you enjoy doing in school? In your leisure time? What do you like to do by yourself? With your family (p.3)?" Parents are cautioned not to neglect the obvious. Examples are given to illustrate this.

Units two, three, four, and five flow from Unit one. These include:

Unit Two: List what s/he finds enjoyable about each activity.

Unit Three: List what values and strengths are shown in each activity.

Unit Four: Identify patterns that occur over and over across activities.

Unit Five: Use these likes, values, and strengths to brainstorm suitable jobs and begin finding out more about them.

(2) Career Grid Workbook (3-5 hours)

The career grid helps the child make a decision by using a visual frame. Completion of the grid is based upon the information obtained in the Activities Self-Exploration Workbook. The structure of this workbook includes exercises which:

a) Expand and then narrow occupations to the ten best possibilities.

b) Expand and then narrow desirable features of occupations to the ten most important ones.

c) Rate each occupation using the grid. The top ten career choices of the child are written along the top of the grid and the positive considerations or values in a career are written along the left side. The career choices are rated on a five point scale by indicating how positive or negative a career is on each consideration. All careers are rated on all considerations. The column of numbers for each career choice is added and the top three are selected for further discussion and analysis. An example of a completed grid appears on page 141.

d) Use a decision procedure to evaluate and analyse these three career areas.

(3) Planning Workbook (2-5 hours)

This workbook guides parents to help their children identify institutions for further training or education and determine entrance requirements and costs. One unit deals with ways the child can improve upon personal characteristics. There are scenarios to strengthen awareness of effective career planning. The units in this workbook include:

Unit One: Find out what training is required for a specific career.

Unit Two: Find out the entrance requirements for post secondary training.

Unit Three: Plan education to meet those requirements.

Unit Four: Estimate financial costs.

Unit Five: Decide which institution is best.

Unit Six: Plan how to keep options open.

Unit Seven: Anticipate ways to minimize risks.

Unit Eight: Decide upon personal characteristics to be improved.

CAREER GRID

Occupations

Career Values		1	2	3	4	5	6	7	8	9	10
		Customs Officer	Police Woman	Private Invest.	Personnel Officer	Tour Agent	Hotel Manager	Reporter	Photog.	Fashion Designer	Translator
1.	Interesting	2	2	2	1	2	1	1	1	2	1
2.	Power & Authority	2	2	0	1	-1	2	0	-2	-1	-2
3.	Freedom	1	1	2	1	-2	-1	1	2	-1	-1
4.	Work Associates	1	1	-1	2	1	1	1	1	1	0
5.	Style of Life	1	0	1	0	1	-1	-2	-2	1	-1
6.	Control of Job	1	2	-1	1	-1	2	-2	-1	1	1
7.	Salary	2	1	-1	1	0	1	1	0	-1	-1
8.	Enjoyable	2	1	1	-1	1	1	2	2	1	-1
9.	Creative	-2	-2	-2	0	1	2	-2	2	2	-2
10.	Personal Growth	2	1	1	1	2	2	1	-1	2	2
Positivity		12	9	2	7	4	10	1	2	7	-4

PARENT CAREER GUIDANCE MANUAL

Larry R. Cochran, Ph.D.

This program is intended for parents who would like to become more involved in helping their children to set a career direction. The aim of the program is to facilitate a beginning foundation for your child's career development. Through exercises in the workbooks, you will help your child to explore interests, values, and strengths, and in general, try to make clear what your child wants in a career and what he or she is capable of doing. You will help your child to evaluate occupational possibilities and to make a tentative decision. And you will help to make a plan to gain entrance to an occupation. A second aim is to strengthen family bonds that support a young person's passage into the adult world. Many families have good relationships, but oddly enough, not good working relationships. Parents care a great deal, but are often strangely isolated from their child's efforts to launch a career. In making a career plan, your child is entering one of the most difficult transitions in life, a transition some never fully make and spend much of their adult lives trying to correct. If there is a time for parental involvement, support, and guidance, this is it.

The program includes three workbooks. Each workbook has several units or tasks to accomplish. Below is an outline of the program.

ACTIVITIES WORKBOOK

- UNIT ONE:** Generate ten activities your child finds enjoyable.
UNIT TWO: List what he or she finds enjoyable about each activity.
UNIT THREE: List what values are involved in each activity.
UNIT FOUR: List what strengths are shown in each activity.
UNIT FIVE: Identify likes, values, and strengths that occur over and over across activities.
UNIT SIX: Use these likes, values, and strengths to brainstorm suitable jobs and begin finding out more about them.

CAREER GRID WORKBOOK

- UNIT ONE:** Expand and then narrow occupations to the ten best possibilities.
UNIT TWO: Expand and then narrow desirable features of occupations to the ten most important ones.
UNIT THREE: Rate or grade each occupation on each desirable feature.
UNIT FOUR: Use a decision procedure to evaluate and rank occupations from most to least desirable.

PLANNING WORKBOOK

- UNIT ONE:** Find out what training is required for an occupation and where one can get it.
UNIT TWO: Find out the entrance requirements for training.
UNIT THREE: Plan education to meet those requirements.
UNIT FOUR: Estimate financial costs and resources for training.
UNIT FIVE: Decide which educational or training institution is best.
UNIT SIX: Plan how to keep options open.
UNIT SEVEN: Anticipate ways to minimize risks.
UNIT EIGHT: Decide upon personal characteristics to improve.

In the Activities Workbook, the parent should pose the question of each unit and take notes on the appropriate tables. For example, once you have ten activities listed, you would ask (In Unit Two): What are the things you like about the first activity? As your child mentions things, you would take notes. Sometimes you will have things to suggest as well. Sometimes, your child will talk rather vaguely and you might try to accurately summarize or pinpoint what it is he or she likes. And sometimes, your child might need encouragement to expand upon his or her likes. The tasks of this workbook are quite simple, but do require some help to do well. Often, the experience of completing the Activities Workbook is that of a fast-paced discussion. You could complete the whole workbook in a few hours but it would probably be better to use a few sessions.

When you finish the Activities Workbook, you will be directed to find out about occupations that seem suitable. However, a search for information should be on-going. While it starts here, it should continue throughout the program. If you arrange, for instance, to meet with your child for an hour or so once or twice a week, your child could look up information, complete interest tests, or whatever, between these sessions.

In the Career Grid Workbook, you will not take notes, but will continue to suggest, clarify, direct, pose the tasks, discuss, and generally help to do whatever needs to be done. For this workbook particularly, read each unit before you get together with your child. For Unit Three, it would probably be best to cut out the career grid. Unit Four should involve considerable discussion as your child will be weighing one value against another, a task that can benefit from the broader perspective and experience of a parent.

In the Planning Workbook, the units are directed toward your child primarily, but it really requires both parent and child. The reason for this is that planning partially involves financial support, a topic that is apt to involve parents quite heavily. The Planning Workbook is a rather straightforward frame for gathering information and organizing it into a plan, so that everyone knows who is responsible for what if the plan is to succeed.

During the program, you and your child have a number of basic controls:

1. You can decide how much time, effort, and concentration to place on each unit. Each unit can be completed in one session or spaced over several sessions. Be guided by the needs of yourself and your child. For example, if your child has a clear interest area, there may be no need to concentrate on the Activity Workbook. If your child is vague and uncertain, you might want to spend a lot of time on this Workbook.
2. You can decide what parts of a unit will be stressed. What will be placed in focus and what will be unstressed?
3. You can decide on the level of focus that is most appropriate. Sometimes, you might help your child with a focus on precise detail in order to gain clarity. At other times, you will want to step back and get the whole in perspective.
4. You can highlight reasons for focusing on one thing or another. Your reasons will help to co-ordinate the way you and your child approach the task.
5. You can maintain a unifying focus by relating aspects of one unit to aspects uncovered in preceding units.
6. You can decide to make additions to units if you wish. For example, you could create exercises, consult a counsellor, use test results and so on.
7. You can decide on the pace. It is probably best to get together once or twice a week. This depends a lot on you and your time. Generally, too slow a pace is apt to hinder interest in the project, but if delicate issues arise, you might deliberately slow things down.

Parental Counselling Role

Parental involvement adds immensely to the quality with which these workbooks are completed, the benefit gained from completing them. Certainly, your child could complete many units on his or her own, and if you are really pressed for time, you could leave a unit for your child to complete alone. However, to maintain interest, enthusiasm, and effort, parent involvement is very important. The workbooks are intended to be a co-operative venture, to cultivate a sense of partnership, a sense of 'we' rather than 'me'. The success of this program depends, to a large extent, upon the quality of the working relationship you and your child form. For this reason, I will cover some of the basic principles that should guide your involvement.

Pay Attention. Be engaged. Be fully there, without letting your mind wander to unpaid bills, work problems, vacation plans, and so on. Really try to discover what your child's likes, values, strengths, and ideas are. In particular, attend to what your child is saying, not to what you wish or want him or her to say. Not only should you give your full attention to the task, you should put attention to use. You might paraphrase what your child has said to make sure you understand it. You might summarize lengthy statements and try to clarify vague ones. Active attention will keep you much more involved than passive attention, and will be much more helpful to your child.

Strive for reciprocity. Like a friendship, partners should be able to give and take without fear of giving offense. Advise and be advised. Correct and be corrected. Encourage and be encouraged. Disagree and accept disagreement. You have a perspective and your child has a perspective. Both must be respected. However, differences are transcended by caring, trust, and mutual respect, an acknowledgement really that each is different. You can cultivate more reciprocity (more giving and taking in a co-operative spirit) by encouraging openness, by showing acceptance (not belittling, criticizing, condescending, or forcing), and by emphasizing positive and constructive comments before focusing on disagreements. In a partnership, there is no room for a tyrant, nor for a neutral observer. To be a partner, there must be a free give and take, and this must often be earned, even if you have a very good relationship with your child already.

Strive for a mutual balance of power. This is similar to reciprocity, but different. For example, one could say: Now that we have had our little give and take, do as I want! Ideally, you will influence your child, and in turn, be influenced by him or her. That is, there will be a balance of power or influence. On some topics, you will have more influence. For example, it is you who must eventually decide how much financial support you can give. On other topics, your child should have more influence. For example, you can advise, but your child is responsible for deciding upon which occupation to pursue. After all, he or she will be living that decision. You cannot take responsibility for your child's career, but can influence it. Like reciprocity, a balance of power requires respect, trust, and openness. It requires taking the other into account. It requires good faith rather than hidden agendas. The fact is that you do care what your child thinks, values, and does. There is no point in hiding behind a phony neutrality. However, it is also true that your child is a person in his or her own right, and you cannot command or demand forever. It is this type of situation that calls for balance, a willingness to influence and to be influenced.

Create warmth. A partnership of this nature is not like a business transaction. A warm, supportive relationship is essential for the type of exploration, evaluation, and planning that this program requires. If the climate is like that of a final examination, a trial, or an execution, the partnership is more apt to be destructive than constructive. It is warmth that will allow discussion to flow freely, for a working alliance on the issue of career development to occur, and for the program to work.

If you cannot establish a reasonable partnership, terminate the program. With a poor working relationship, it is doubtful if anyone would benefit. For most people, there will be moments of discouragement, but many more moments of meaningful achievement. And most people will have little trouble forming a working relationship, but if not, there is apt to be a good reason and one should attend to this reason rather than the program.

Goals of the Program

It is commonly assumed that there is one right job for each person and the goal of career counselling is to discover that job. Then, the person works hard presumably, succeeds in getting the right job, and lives a happy, contented life. While this might happen once in a while, it is largely nonsense.

There is no one right job. A person has a variety of potentials and a variety of options that might be satisfying. People should continue to explore until they have to make a definite commitment. It would be perfectly natural for your child to change his or her mind within a week, month or year. People change. They find out new information. They lose interest. Other occupations might arise as better options. Even if your child stuck with the decision made during this program, people change occupations frequently. Let us consider a more realistic story from which we might set more reasonable goals.

Pursuing a career is filled with uncertainties, risks, opportunities, setbacks, decisions, compromises, adjustments, and sometimes crises. The job market is in flux. New jobs are arising while some old jobs are dwindling and vanishing. People have more difficulty finding an anchor. There is a large element of chance in a career, being in the right place at the right time or being in the wrong place at the wrong time. In this shifting, uncertain environment, some people flounder from job to job without much sign of progress. They can't get what they want, or think they want, and don't want what they can get. Some people drift aimlessly, unsure of what they want and where they are going. Some people become stuck in jobs and stagnate, wondering how they ever fell into such a trap. And some people do indeed progress in a career that is meaningful, satisfying, and productive. Given this situation, the aim of this program is to tilt the odds more in one's favor, to minimize chance and increase purposeful direction. How can the odds be tilted in one's favor?

This program involves four ways to improve one's chances for a meaningful career.

First, this program was intended to improve self-understanding. Without a better understanding of oneself, there is little basis for making wise decisions now or in the future. Does your child have a better grasp of his or her wants and strengths? If so, he or she is in a better position to pursue a career.

Second, a person might have some self-understanding, but little awareness of viable options that would be optimal or even just suitable. It requires knowledge to match one's interests, values, and capabilities to appropriate occupations. The key question is: Does your child have viable options in mind?

Third, one might have knowledge of oneself and occupations, but lack competence in decision making. Even with knowledge, one must be able to use that knowledge to evaluate options and to make good decisions. Does your child have greater competence in making decisions?

Last, on-going support and encouragement from one's family is an important basis for successfully pursuing a career. Perhaps it is not always necessary, but it is a decided advantage that can make a difference in your child's future. The question here is: Did you achieve a good working relationship on the issue of career development?

These four goals provide more enduring grounds for the future development of your child. Certainly, I hope that your child will also emerge with a reasonable decision and a workable plan, but these are really quite secondary. Of much more importance at this time is whether your child has established a foundation for the road ahead.

For yourself or for your child at some later time, record any significant questions, insights, observations, reactions, or even predictions; from your experiences within this program.

Date**Comments and Questions**

APPENDIX B

QUESTIONNAIRE FOR COUNSELLORS

PLEASE TAKE A MINUTE AND FILL OUT THE QUESTIONNAIRE AND DEPOSIT IT AT THE REGISTRATION DESK BEFORE YOU LEAVE. YOUR COOPERATION IS APPRECIATED.

1. School District _____ # _____
2. School: ____ Elementary ____ Junior ____ Secondary
3. Counselling: ____ Full Time ____ % of the time
4. Teaching: Full Time ____ % of the time
5. Is the counselling time the same as it was in 1984?
 ____ Yes ____ NO If no, how has it changed:4?
6. Number of counsellors at your school? _____
 Number of students at you school? _____
7. Percentage of time you spend on:
 _____ Individual student counselling
 _____ Parent Interviews
 _____ Career counselling
 _____ Administrative duties
 _____ Other . Please specify _____
8. Is this amount of time adequate for:
 Individual counselling _____
 Career counselling _____
 Parent interviews _____
 Administrative duties _____
 Comments _____
9. Approximately how many hours per school year do you spend
 career counselling a grade ten student _____
 grade eleven student _____
 grade twelve student _____
 Comments: _____
10. Would you like to see more parental involvement in areas
 such as career counselling? ____ Yes ____ No
 Reasons _____
11. Would you like to see more parental involvement in other
 areas of counselling? ____ Yes ____ No
 Reasons _____

APPENDIX E
INSTRUCTIONS TO COUNSELLORS

151

1. Please inform the parents that I will want to call them after the program is completed to get more feedback from them. This may involve a personal interview.
2. The program is self explanatory. There is a manual for the parents to follow and they should refer to it if they have any difficulties with the program. They should call you if they cannot understand the manual. Please explain to them that because it is still in the testing stage, we need them to fill out the questionnaires and seek their feedback.
3. The Career Development Inventory is given to students before and after the program. Please use the forms for the pretest and the booklets for the posttest.
4. FACES is given to students and parents as a pretest. Again, have them use the forms for the pretest and the booklets for the posttest. Give them the questionnaires as well.
5. Inform the parents in the control group that they will be given the program in four weeks time.
6. After two weeks have gone by, could you please phone one or two parents to see how the program is going.
7. There are two short questionnaires that the parents and students fill out at the end.

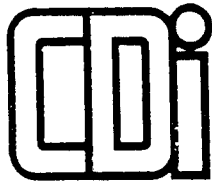
Thank you for helping me with this venture. Please call me if you have any problems or questions and by the way, I'll owe you one after this!

APPENDIX F

Career Development Inventory (CDI). Developed by Drs. Donald E. Super,
Albert S. Thompson, et al. School form.

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School Form

Developed by Drs. Donald E. Super, Albert S. Thompson,
Richard H. Lindeman, Jean P. Jordaan, and Roger A. Myers
at Teachers College, Columbia University

Career Development Inventory

DIRECTIONS

The Career Development Inventory asks you about school, work, your future career, and some of the plans you may have made. Answers to questions like these can indicate what kind of help may be useful to you in planning and preparing for a job after graduation, for vocational and technical school training, or for going to college before pursuing your occupational career.

The Inventory consists of two parts. The person who administers it will indicate whether you should complete the first part, the second part, or both parts. Part I (Career Orientation) begins on the next page and Part II (Knowledge of Preferred Occupation) begins on Page 11.

All your answers to the CDI go on a special answer sheet which should accompany this booklet. Make no marks of any kind on this booklet. Record your answers by blackening the appropriate lettered boxes on the answer sheet, using a #2 lead pencil. Do not use a pen. If you change an answer, please erase thoroughly.

Before opening the test booklet, fill in your name and the other information requested on the upper third of the answer sheet, following any special instructions of the person administering the inventory. Fill in the name boxes carefully.

When directed to do so, open this booklet and begin. Please answer every question. If you are not sure about an answer, guess; the first answer that comes to you is often the best one. Work rapidly, but be careful to make your marks in the right boxes for each question.

Consulting Psychologists Press, Inc., Palo Alto, California

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A. CAREER PLANNING

How much thinking and planning have you done in the following areas? For each question below choose the answer that best tells what you have done so far.

1. Finding out about educational and occupational possibilities by going to the library, sending away for information, or talking to somebody who knows.
 - A. I have not yet given any thought to this.
 - B. I have given some thought to this, but haven't made any plans yet.
 - C. I have some plans, but am still not sure of them.
 - D. I have made definite plans, but don't know yet how to carry them out.
 - E. I have made definite plans, and know what to do to carry them out.
2. Talking about career plans with an adult who knows something about me.
 - A. I have not yet given any thought to this.
 - B. I have given some thought to this, but haven't made any plans yet.
 - C. I have some plans, but am still not sure of them.
 - D. I have made definite plans, but don't know yet how to carry them out.
 - E. I have made definite plans, and know what to do to carry them out.
3. Taking classes which will help me decide what line of work to go into when I leave school or college.
 - A. I have not yet given any thought to this.
 - B. I have given some thought to this, but haven't made any plans yet.
 - C. I have some plans, but am still not sure of them.
 - D. I have made definite plans, but don't know yet how to carry them out.
 - E. I have made definite plans, and know what to do to carry them out.
4. Taking classes which will help me in college, in job training, or on the job.
 - A. I have not yet given any thought to this.
 - B. I have given some thought to this, but haven't made any plans yet.
 - C. I have some plans, but am still not sure of them.
 - D. I have made definite plans, but don't know yet how to carry them out.
 - E. I have made definite plans, and know what to do to carry them out.
5. Taking part in school or out-of-school activities which will help me in college, in training, or on the job.
 - A. I have not yet given any thought to this.
 - B. I have given some thought to this, but haven't made any plans yet.
 - C. I have some plans, but am still not sure of them.
 - D. I have made definite plans, but don't know yet how to carry them out.
 - E. I have made definite plans, and know what to do to carry them out.
6. Taking part in school or after-school activities (for example, science club, school newspaper, volunteer nurse's aide) which will help me decide what kind of work to go into when I leave school.
 - A. I have not yet given any thought to this.
 - B. I have given some thought to this, but haven't made any plans yet.
 - C. I have some plans, but am still not sure of them.
 - D. I have made definite plans, but don't know yet how to carry them out.
 - E. I have made definite plans, and know what to do to carry them out.

Go on to the next page.

7. Getting a part-time or summer job which will help me decide what kind of work I might go into.
- A. I have not yet given any thought to this.
 - B. I have given some thought to this, but haven't made any plans yet.
 - C. I have some plans, but am still not sure of them.
 - D. I have made definite plans, but don't know yet how to carry them out.
 - E. I have made definite plans, and know what to do to carry them out.
8. Getting money for college or for job training.
- A. I have not yet given any thought to this.
 - B. I have given some thought to this, but haven't made any plans yet.
 - C. I have some plans, but am still not sure of them.
 - D. I have made definite plans, but don't know yet how to carry them out.
 - E. I have made definite plans, and know what to do to carry them out.
9. Working out problems that might make it hard for me to get the kind of training or the kind of work I would like.
- A. I have not yet given any thought to this.
 - B. I have given some thought to this, but haven't made any plans yet.
 - C. I have some plans, but am still not sure of them.
 - D. I have made definite plans, but don't know yet how to carry them out.
 - E. I have made definite plans, and know what to do to carry them out.
10. Getting the kind of training, education, or experience I will need to get the kind of work I would like.
- A. I have not yet given any thought to this.
 - B. I have given some thought to this, but haven't made any plans yet.
 - C. I have some plans, but am still not sure of them.
 - D. I have made definite plans, but don't know yet how to carry them out.
 - E. I have made definite plans, and know what to do to carry them out.
11. Getting a job once I have finished my education and training.
- A. I have not yet given any thought to this.
 - B. I have given some thought to this, but haven't made any plans yet.
 - C. I have some plans, but am still not sure of them.
 - D. I have made definite plans, but don't know yet how to carry them out.
 - E. I have made definite plans, and know what to do to carry them out.
12. Doing things that will help me be a good worker, one who is most likely to be sure of a job.
- A. I have not yet given any thought to this.
 - B. I have given some thought to this, but haven't made any plans yet.
 - C. I have some plans, but am still not sure of them.
 - D. I have made definite plans, but don't know yet how to carry them out.
 - E. I have made definite plans, and know what to do to carry them out.

The next questions concern the kind of work you would like to do when you complete your education. At this stage, you probably have not definitely decided on a specific occupation, but you probably can think of a field of work or type of job you would like to work at. *Keeping in mind the type of job you think you might like to be in after you finish your schooling*, choose the one best answer which tells the amount of knowledge you already have about these jobs.

- | | |
|---|--|
| 13. What people really do on the job. | 14. The abilities needed for the occupation. |
| A. <i>Hardly any</i> knowledge. | A. <i>Hardly any</i> knowledge. |
| B. <i>A little</i> knowledge. | B. <i>A little</i> knowledge. |
| C. <i>An average amount</i> of knowledge. | C. <i>An average amount</i> of knowledge. |
| D. <i>A good deal</i> of knowledge. | D. <i>A good deal</i> of knowledge. |
| E. <i>A great deal</i> of knowledge. | E. <i>A great deal</i> of knowledge. |

Go on to the next page.

15. The working conditions on such jobs.
 - A. *Hardly any knowledge.*
 - B. *A little knowledge.*
 - C. *An average amount of knowledge.*
 - D. *A good deal of knowledge.*
 - E. *A great deal of knowledge.*
16. The education or training needed to get such a job.
 - A. *Hardly any knowledge.*
 - B. *A little knowledge.*
 - C. *An average amount of knowledge.*
 - D. *A good deal of knowledge.*
 - E. *A great deal of knowledge.*
17. The need for people on that kind of job in the future.
 - A. *Hardly any knowledge.*
 - B. *A little knowledge.*
 - C. *An average amount of knowledge.*
 - D. *A good deal of knowledge.*
 - E. *A great deal of knowledge.*
18. Different ways of getting into that occupation.
 - A. *Hardly any knowledge.*
 - B. *A little knowledge.*
 - C. *An average amount of knowledge.*
 - D. *A good deal of knowledge.*
 - E. *A great deal of knowledge.*
19. The chances of advancing in that kind of job or occupation.
 - A. *Hardly any knowledge.*
 - B. *A little knowledge.*
 - C. *An average amount of knowledge.*
 - D. *A good deal of knowledge.*
 - E. *A great deal of knowledge.*
20. What sort of working day and work week I might have in the occupation.
 - A. *Hardly any knowledge.*
 - B. *A little knowledge.*
 - C. *An average amount of knowledge.*
 - D. *A good deal of knowledge.*
 - E. *A great deal of knowledge.*

B. CAREER EXPLORATION

Questions 21 through 30 have four possible answers. Choose the *one best* answer for each question to show whether or not you would go to the following sources for information or help in making your plans for work or further education.

21. Father, mother, uncles, aunts, etc.
 - A. Definitely not.
 - B. Probably not.
 - C. Probably.
 - D. Definitely.
22. Brothers, sisters, or cousins.
 - A. Definitely not.
 - B. Probably not.
 - C. Probably.
 - D. Definitely.
23. Friends.
 - A. Definitely not.
 - B. Probably not.
 - C. Probably.
 - D. Definitely.
24. Coaches of school or other teams.
 - A. Definitely not.
 - B. Probably not.
 - C. Probably.
 - D. Definitely.
25. Teachers.
 - A. Definitely not.
 - B. Probably not.
 - C. Probably.
 - D. Definitely.
26. School counselors.
 - A. Definitely not.
 - B. Probably not.
 - C. Probably.
 - D. Definitely.
27. Other adults who know things and can help people.
 - A. Definitely not.
 - B. Probably not.
 - C. Probably.
 - D. Definitely.
28. College catalogues, books, guidance materials, etc.
 - A. Definitely not.
 - B. Probably not.
 - C. Probably.
 - D. Definitely.
29. People in the occupation or at the institute or college I am considering.
 - A. Definitely not.
 - B. Probably not.
 - C. Probably.
 - D. Definitely.
30. TV shows, movies, or magazines.
 - A. Definitely not.
 - B. Probably not.
 - C. Probably.
 - D. Definitely.

Questions 31 through 40 also have four possible answers. This time choose the *one best* answer to show how much useful information the people or sources listed below have already given you or directed you to in making your plans for the future.

- | | |
|---|--|
| <p>31. Father, mother, uncles, aunts, etc.</p> <p>A. <i>No useful information.</i>
 B. <i>Some useful information.</i>
 C. <i>A good deal of useful information.</i>
 D. <i>A great deal of useful information.</i></p> <p>32. Brothers, sisters, or other relatives.</p> <p>A. <i>No useful information.</i>
 B. <i>Some useful information.</i>
 C. <i>A good deal of useful information.</i>
 D. <i>A great deal of useful information.</i></p> <p>33. Friends.</p> <p>A. <i>No useful information.</i>
 B. <i>Some useful information.</i>
 C. <i>A good deal of useful information.</i>
 D. <i>A great deal of useful information.</i></p> <p>34. Coaches of school or other teams.</p> <p>A. <i>No useful information.</i>
 B. <i>Some useful information.</i>
 C. <i>A good deal of useful information.</i>
 D. <i>A great deal of useful information.</i></p> <p>35. Teachers.</p> <p>A. <i>No useful information.</i>
 B. <i>Some useful information.</i>
 C. <i>A good deal of useful information.</i>
 D. <i>A great deal of useful information.</i></p> | <p>36. School counselors.</p> <p>A. <i>No useful information.</i>
 B. <i>Some useful information.</i>
 C. <i>A good deal of useful information.</i>
 D. <i>A great deal of useful information.</i></p> <p>37. Other adults who know things and can help people.</p> <p>A. <i>No useful information.</i>
 B. <i>Some useful information.</i>
 C. <i>A good deal of useful information.</i>
 D. <i>A great deal of useful information.</i></p> <p>38. College catalogues, books, guidance materials, etc.</p> <p>A. <i>No useful information.</i>
 B. <i>Some useful information.</i>
 C. <i>A good deal of useful information.</i>
 D. <i>A great deal of useful information.</i></p> <p>39. People in the occupation or at the institute or college I am considering.</p> <p>A. <i>No useful information.</i>
 B. <i>Some useful information.</i>
 C. <i>A good deal of useful information.</i>
 D. <i>A great deal of useful information.</i></p> <p>40. TV shows, movies, or magazines.</p> <p>A. <i>No useful information.</i>
 B. <i>Some useful information.</i>
 C. <i>A good deal of useful information.</i>
 D. <i>A great deal of useful information.</i></p> |
|---|--|

C. DECISION-MAKING

What should each of the following students do? Choose the *one best* answer for each case.

41. E.R. took some tests which show some promise for clerical work. This student says, "I just can't see myself sitting behind a desk for the rest of my life. I'm the kind of person who likes variety. I think a traveling job would suit me fine." E.R. should:
- A. disregard the tests and do what he or she wants to do.
 B. do what the tests say since they know best.
 C. look for a job which requires clerical ability but does not pin one to a desk.
 D. ask to be tested with another test since the results of the first one are probably wrong.
42. J.D. might like to become a computer programmer, but knows little about computer programming, and is going to the library to find out more about it. The most important thing for J.D. to know now is:
- A. what the work is, what one does on the job.
 B. what the pay is.
 C. what the hours of work are.
 D. where one can get the right training.

Go on to the next page.

43. A.M. is very good with skilled handiwork and there isn't anybody in the class who has more mechanical aptitude or is better at art. A.M.'s best grades are in math, but A.M. likes all of these things. What should A.M. do?
- Look for an occupation which will use as many of these interests and abilities as possible.
 - Pick an occupation which uses math, since there is a better future in that than in art or in working with one's hands.
 - Decide now on one of these activities because of ability or interest, and then pick an occupation which uses that kind of asset.
 - Put off deciding about the future and wait until interest in some of these activities declines.
44. B.R. gets very good science grades but doesn't care too much about this subject. The subject B.R. liked best is art even though grades in it are only average. This student is most likely to do well in a future occupation if he or she:
- forgets about interest in art since achievement is so much better in science.
 - doesn't worry about the achievement in art, because if you like something you can become good at it.
 - looks for an occupation which uses both art and science, but more science than art.
 - looks for an occupation which involves both science and art, but more art than science.
45. L.F. seems not to really care what kind of work is available on leaving school as long as it is working with people. If this is all this student cares about, he or she is likely to make a bad choice because:
- this kind of work usually requires a college degree.
 - employers usually hire people with definite interests and objectives.
 - people look down on those who work with people because such work usually doesn't pay as well as technical work.
 - occupations in which one works with people can be very different from each other in the abilities and interests which are needed.
46. R.A. has good grades in all high school courses, wants to go to college, has parents' approval for going to college, but has no occupational plans. What is the best next step for R.A.?
- Delay college until occupational plans emerge.
 - Choose a college major that is very difficult.
 - Choose a college where exploring several majors is encouraged during the first two years.
 - Find out about graduate and professional school requirements.
47. A.K. can't decide whether to become an air-conditioning and refrigeration technician or an engineer. In making the choice, to which of the following should A.K. pay the most attention?
- How much money A.K. wants to earn.
 - How much education and training A.K. is likely to be able to get.
 - What A.K.'s parents would prefer.
 - Which occupation people respect most.
48. P.T. is a high school junior with no education or vocational plans beyond high school. What would you recommend that P.T. do first?
- A thorough search of colleges to attend.
 - An analysis of relevant personal characteristics such as abilities, interests, and values.
 - An intensive study of information about occupations.
 - A matching of P.T.'s abilities with job requirements.
49. E.B. is a ninth-grader with excellent school grades and very high scores on all ability tests, but has no educational or vocational plans. What is the best advice to give to E.B.?
- Arrive at a definite goal as soon as possible.
 - Not to be concerned about a goal or a plan because success is almost certain.
 - Concentrate on selecting the right college.
 - Find out when important choices will have to be made and get the needed information.

Go on to the next page.

50. An uncle has just told T.H. that his company is always looking for tool and die makers, pays them well and keeps them on the payroll even in bad times. T.H. is interested and wants to learn more about the occupation. What is the most important thing for T.H. to learn?
- A. Where tool and die makers work.
 - B. How much training is required.
 - C. What is the work tool and die makers do.
 - D. What tool and die makers actually are paid.
51. L.M. has good school grades and looks forward to studying engineering in college. What is the best advice to help L.M. plan a tenth-grade course schedule?
- A. Be sure to schedule college preparatory math and science.
 - B. Get all of the shop courses it is possible to take.
 - C. Take a light load because in college it will be hard work.
 - D. Allow time for a part-time job to learn what engineers do.
52. J.M., who has always dreamed of being either a lawyer or a business executive, cannot plan for college because of the cost. J.M.'s grades and test scores show good promise for college. What should be recommended for J.M. after high school?
- A. Find a job in a law office and go to law school at night.
 - B. Get a job in a business concern that offers on-the-job training and other educational opportunities.
 - C. Forget about law and business and work in a field that requires no education.
 - D. Find a rewarding hobby.
53. M.J. is considering becoming either a research chemist or a lawyer. In choosing between the two, which of the following should be given the most weight?
- A. Whether M.J.'s ability in science and grades in science courses are good enough.
 - B. Whether M.J. can afford to go to college.
 - C. Whether M.J. can get admitted to college.
 - D. Whether M.J.'s friends think the choice is a good one.
54. After careful thought, E.K. has decided on business training for a year or two after high school. However, deciding between majors in accounting and sales remains a problem for E.K. In exploring this problem, to what should be given the most weight?
- A. The difference in training time required by the two majors.
 - B. The chances of being admitted for training in the major.
 - C. Which major requires the most work.
 - D. Which major best fits E.K.'s abilities and interests.
55. J.F. is the best all-around artist in the class, winning art competitions consistently. But academic subject matter comes hard to J.F., who will probably graduate in the bottom fifth of the senior class. Which is the most realistic educational plan for J.F.?
- A. Seek admission to a university where one can combine art and regular college subjects to earn a Bachelor of Fine Arts.
 - B. Forget about any education beyond high school.
 - C. Forget about art and concentrate on college preparatory subjects.
 - D. Seek admission to an art school where poor academic grades will not be a handicap.
56. L.D. wants to be a newspaper reporter. Which of the following paths might lead to becoming a qualified newspaper reporter?
- A. Working full-time on a newspaper and continuing education on a part-time basis.
 - B. Earning a bachelor's degree in Journalism.
 - C. Taking a liberal arts degree first, followed by a graduate degree in Journalism.
 - D. Any of the above.
57. B.D.'s interest in and skill at helping others have become the most important part of B.D.'s self-picture. Which occupation should B.D. probably not be considering?
- A. Nurse's aide.
 - B. Recreation worker.
 - C. Sales person.
 - D. Teacher's aide.

58. R.R. gets B's in math and science but has failed ninth-grade English twice, and gets D's in social studies courses. Which occupation makes the most sense for R.R.?
- A. Engineering technician.
 - B. Veterinarian.
 - C. Civil engineer.
 - D. Science and math teacher.
59. R.J. has high ability, excellent grades and the money to go to college. R.J.'s only clear future goal is to make a great deal of money. What should R.J. do?
- A. Pursue a career in medicine because that's where the money is.
 - B. Arrive at an appropriate vocational goal and the money will take care of itself.
 - C. Change goals because wanting a lot of money is not a good thing.
 - D. Find out what wanting to make a lot of money really means.
60. A.S. has good tested ability but has poor high-school grades. The counselor advises that A.S. will not be admitted to any college because of the high school record. A.S. thinks the problems that caused the low grades are now solved and wants to get more education. What is A.S.'s best course of action?
- A. Forget about college and seek a satisfying job.
 - B. Repeat courses in high school in order to improve the grades.
 - C. Find out about junior colleges and community colleges whose admission standards are less demanding.
 - D. Get private tutoring in the weak subjects.

D. WORLD-OF-WORK INFORMATION

Choose the *one best* answer to each of the following questions about career development and the world of work.

61. Tenth graders should be expected to know
- A. exactly what occupation they want to go into.
 - B. the kind of work but not necessarily the specific occupation they want.
 - C. where to get the job they want.
 - D. the different occupations a person with their interests and abilities could go into.
62. When a teacher or counselor encourages students to explore themselves and the world about them, what he or she wants them to do is to
- A. be active in school affairs.
 - B. go on field trips.
 - C. try themselves out in a variety of situations and activities.
 - D. take some aptitude tests.
63. Exploring interests, abilities and opportunities is something which people should be encouraged to engage in
- A. throughout their lives.
 - B. when they become dissatisfied with the way things are.
 - C. when they lose their jobs.
 - D. when things start to go wrong.
64. Which of the following will help high school students most in thinking about a career?
- A. Making the right contacts.
 - B. Setting an occupational goal early and sticking to it.
 - C. Finding out where the best opportunities for employment are.
 - D. Finding out what activities and courses they like most and are best at.

Go on to the next page.

65. The reason why many young people change jobs frequently between the ages of 18 and 25 is that they
- A. don't know when they are well off.
 - B. received wrong advice from their parents and teachers.
 - C. are the first to be fired when business is bad.
 - D. don't know enough about themselves or work to make good choices.
66. Suppose you know what *kind* of work you would like to do and also know about the many different occupations which can be found in that field. What information would you need to be able to pick out those occupations which are at the right *level* for you? (By *field* is meant the kind of work you would like to do, for example, scientific work, social service work, work involving machines and tools; by *level* is meant the amount of education and training you would need to get, and the amount of responsibility you would have to carry on the job.)
- A. Information about your abilities.
 - B. Information about educational and training requirements.
 - C. Information about what it would cost to get the needed training and education.
 - D. All of the above.
67. The most important thing about the courses you take at college or the jobs you take after you leave school is
- A. what the courses or jobs tell you about your interests and abilities.
 - B. whether the courses or jobs are easy or difficult.
 - C. whether your parents approve of the choice of courses or jobs.
 - D. what your instructors or employers think of you.
68. Being happy in a job is mostly a matter of
- A. being paid well.
 - B. having interesting things to do when your day's work is done.
 - C. knowing what you want from a job and getting it.
 - D. receiving promotions and pay increases.
69. Students who want to go to college or to seek a particular kind of job when they leave high school can improve their chances most by
- A. being active in school affairs.
 - B. choosing appropriate high school courses.
 - C. getting along with their teachers and counselors.
 - D. choosing courses in which they know they will get good grades.
70. A student who, on leaving high school, takes a semi-skilled factory job at a good wage instead of a learner's job or apprenticeship
- A. gives up a better future for a better present.
 - B. should work his way up to a more skilled job easily enough.
 - C. is probably following the school counselor's advice.
 - D. is probably giving in to pressure from parents.
71. Family doctors (physicians) usually learn their jobs in
- A. high schools.
 - B. community colleges or technical schools.
 - C. four-year colleges or universities.
 - D. graduate or professional schools.
72. Mail carriers usually learn their jobs in
- A. high schools.
 - B. apprenticeships or on-the-job training.
 - C. community colleges or technical schools.
 - D. four-year colleges or universities.

Go on to the next page.

73. Medical laboratory technicians are most likely to use
- A. levels.
 - B. log tables.
 - C. tongue depressors.
 - D. microscopes.
74. A stock broker is most likely to use
- A. a calculator.
 - B. calipers.
 - C. forceps.
 - D. a micrometer.
75. Bookkeepers are most likely to use
- A. lathes.
 - B. calculators.
 - C. ledgers.
 - D. slide rules.
76. Which of the following workers is most likely to be able to forget about work after leaving the workplace?
- A. Administrative assistant
 - B. Secretary
 - C. Typist
 - D. Credit clerk
77. Waiters and waitresses are usually paid
- A. weekly salaries.
 - B. hourly wages.
 - C. wages and tips.
 - D. tips only.
78. In starting a new job, it is most important to
- A. make sure the other workers like you.
 - B. show that you are your own boss.
 - C. be aware of how others feel about things.
 - D. hide your own feelings from others.
79. In dealing with customers, clients, or other outsiders with whom your work brings you in contact, it is most important to
- A. show them you know more about your work than they do.
 - B. understand what they want and see if you can help them get it.
 - C. make sure that you do only as you are told.
 - D. do whatever brings in the most money.
80. Which of the following is most important in a job application interview?
- A. Telling the interviewer you will do any work so long as the job is a good one.
 - B. Knowing what salary or pay to ask for.
 - C. Finding out whether you and the job are right for each other.
 - D. Being introduced by a mutual friend.

End of Part I.

APPENDIX G

Family Adaptability and Cohesion Evaluation Scales (FACES)

Olson, D.H., Bell. R., & Portner, J. FACES: Family Adaptability and Cohesion Evaluation Scales. St. Paul: University of Minnesota, 1978.

Leaves 162-67 not filmed; permission not obtained.

APPENDIX G
FAMILY ADAPTABILITY AND COHESION EVALUATION
SCALES

Thank you for taking the time to fill out the following questions. Your input will give us an indication of how well the program is working.

INSTRUCTIONS

Answer the following by placing 4 = true all the time
3 = true most of the time
2 = true some of the time
1 = true none of the time
beside each statement as it pertains to you.

FACES

4 = true all the time 2 = true some of the time
3 = true most of the time 1 = true none of the time

- _____ 1. Family members are concerned with each other's welfare.
- _____ 2. Family members feel free to say what's on their mind.
- _____ 3. We don't have spur of the moment guests at mealtime.
- _____ 4. It is hard to know who the leader is in our family.
- _____ 5. It's difficult for family members to take time away from the family.
- _____ 6. Family members are afraid to tell the truth because of how harsh the punishment will be.
- _____ 7. Most personal friends are not family friends.
- _____ 8. Family members talk a lot but nothing ever gets done.
- _____ 9. Family members feel guilty if they want to spend some time alone.
- _____ 10. There are times when other family members do things that make me unhappy.
- _____ 11. In our family we know where all family members are at all times.
- _____ 12. Family members have some say in what is required of them.
- _____ 13. The parents in our family stick together.
- _____ 14. I have some needs that are not being met by family members.
- _____ 15. Family members make the rules together.
- _____ 16. It seems like there is never any place to be alone in our house.
- _____ 17. It is difficult to keep track of what other family members are doing.
- _____ 18. Family members do not check with each other when making decisions.
- _____ 19. My family completely understands and sympathizes with my every mood.
- _____ 20. Family ties are more important to us than any friendship could possibly be.
- _____ 21. When our family has an argument, family members just keep to themselves.
- _____ 22. Family members often answer questions that were addressed to another person.
- _____ 23. The parents check with the children before making important decisions in our family.
- _____ 24. Family members like to spend some of their free time with each other.
- _____ 25. Punishment is usually pretty fair in our family.
- _____ 26. Family members are encouraged to have friends of their own as well as family friends.

PAGES

-2-

4 = true all the time
3 = true most of the time

2 = true some of the time
1 = true none of the time

- ___ 27. Family members discuss problems and usually feel good about the solutions.
- ___ 28. Family members share almost all interests and hobbies with each other.
- ___ 29. Our family is not a perfect success.
- ___ 30. Family members are extremely independent.
- ___ 31. No one in our family seems to be able to keep track of what their duties are.
- ___ 32. Family members feel it's "everyone for themselves."
- ___ 33. Every new thing I've learned about my family has pleased me.
- ___ 34. Our family has a rule for almost every possible situation.
- ___ 35. We respect each other's privacy.
- ___ 36. Once our family has planned to do something, it's difficult to change it.
- ___ 37. In our family we are on our own when there is a problem to solve.
- ___ 38. I have never regretted being with my family, not even for a moment.
- ___ 39. Family members do not turn to each other when they need help.
- ___ 40. It is hard to know what other family members are thinking.
- ___ 41. Family members make visitors feel at home.
- ___ 42. Parents make all of the important decisions in our family.
- ___ 43. Even when everyone is home, family members spend their time separately.
- ___ 44. Parents and children in our family discuss together the method of punishment.
- ___ 45. Family members have little need for friends because the family is so close.
- ___ 46. We feel good about our ability to solve problems.
- ___ 47. Although family members have individual interests, they still participate in family activities.
- ___ 48. My family has all the qualities I've always wanted in a family.
- ___ 49. Family members are totally on their own in developing their ideas.
- ___ 50. Once a task is assigned to a family member, there is no chance of changing it.
- ___ 51. Family members seldom take sides against other members.
- ___ 52. There are times when I do not feel a great deal of love and affection for my family.
- ___ 53. When rules are broken, family members are treated fairly.

FACES

-3-

4 = true all the time

2 = true some of the time

3 = true most of the time

1 = true none of the time

-
- ___ 54. Family members don't enter each other's areas or activities.
- ___ 55. Family members encourage each other's efforts to find new ways of doing things.
- ___ 56. Family members discuss important decisions with each other, but usually make their own choices.
- ___ 57. If I could be a part of any family in the world, I could not have a better match.
- ___ 58. Home is one of the loneliest places to be.
- ___ 59. In our family, it's important for everyone to express their opinion.
- ___ 60. Family members find it easier to discuss things with persons outside the family.
- ___ 61. There is no leadership in our family.
- ___ 62. We try to plan some things during the week so we can all be together.
- ___ 63. Family members are not punished or reprimanded when they do something wrong.
- ___ 64. In our family we know each other's close friends.
- ___ 65. Our family does not discuss its problems.
- ___ 66. Our family doesn't do things together.
- ___ 67. If my family has any faults, I am not aware of them.
- ___ 68. Family members enjoy doing things alone as well as together.
- ___ 69. In our family, everyone shares responsibilities.
- ___ 70. Parents agree on how to handle the children.
- ___ 71. I don't think anyone could possibly be happier than my family and I when we are together.
- ___ 72. It is unclear what will happen when rules are broken in our family.
- ___ 73. When a bedroom door is shut, family members will knock before entering.
- ___ 74. If one way doesn't work in our family, we try another.
- ___ 75. Family members are expected to have the approval of others before making decisions.
- ___ 76. Family members are totally involved in each other's lives.
- ___ 77. Family members speak their mind without considering how it will affect others.
- ___ 78. Family members feel comfortable inviting their friends along on family activities.

FACES

-4-

4 = true all the time

2 = true some of the time

1 = true most of the time

1 = true none of the time

-
- ___ 79. Each family member has at least some say in major family decisions.
- ___ 80. Family members feel pressured to spend most free time together.
- ___ 81. Members of our family can get away with almost anything.
- ___ 82. Family members share the same friends.
- ___ 83. When trying to solve problems, family members jump from one attempted solution to another without giving any of them time to work.
- ___ 84. We have difficulty thinking of things to do as a family.
- ___ 85. Family members understand each other completely.
- ___ 86. It seems as if we agree on everything.
- ___ 87. It seems as if males and females never do the same chores in our family.
- ___ 88. Family members know who will agree and who will disagree with them on most family matters.
- ___ 89. My family could be happier than it is.
- ___ 90. There is strict punishment for breaking rules in our family.
- ___ 91. Family members seem to avoid contact with each other when at home.
- ___ 92. For no apparent reason, family members seem to change their minds.
- ___ 93. We decide together on family matters and separately on personal matters.
- ___ 94. Our family has a balance of closeness and separateness.
- ___ 95. Family members rarely say what they want.
- ___ 96. It seems there are always people around home who are not members of the family.
- ___ 97. Certain family members order everyone else around.
- ___ 98. It seems as if family members can never find time to be together.
- ___ 99. Family members are severely punished for anything they do wrong.
- ___ 100. We know very little about the friends of other family members.
- ___ 101. Family members feel they have no say in solving problems.
- ___ 102. Members of our family share many interests.
- ___ 103. Our family is as well adjusted as any family in this world can be.
- ___ 104. Family members are encouraged to do their own thing.
- ___ 105. Family members never know how others are going to act.
- ___ 106. Certain individuals seem to cause most of our family problems.

FACES

-5-

4 = true all the time 2 = true some of the time
3 = true most of the time 1 = true none of the time

- ____ 107. I don't think any family could live together with greater harmony than my family.
- ____ 108. It is hard to know what the rules are in our family because they always change.
- ____ 109. Family members find it hard to get away from each other.
- ____ 110. Family members feel that the family will never change.
- ____ 111. Family members feel they have to go along with what the family decides to do.

PARENT QUESTIONNAIRE

INSTRUCTIONS: Please circle the rating which best describes the present situation concerning your child's career.

- | | | | | | |
|--|---------------------------|---|---|---|--------------------------|
| 1. To what extent does your child know about his or her career interests, strengths, and values? | is not aware
1 | 2 | 3 | 4 | is very aware
5 |
| 2. To what extent is your child aware of the different career options and how to attain them? | is not aware
1 | 2 | 3 | 4 | is very aware
5 |
| 3. To what extent is your child capable of making sound career decisions? | is not capable
1 | 2 | 3 | 4 | is very capable
5 |
| 4. To what extent do you pay attention to your child's career plans? | do not pay attention
1 | 2 | 3 | 4 | pay close attention
5 |
| 5. To what extent do you and your child discuss career ideas freely in a give and take way? | not freely
1 | 2 | 3 | 4 | very freely
5 |
| 6. To what extent are you able to mutually influence one another when discussing careers? | not at all
1 | 2 | 3 | 4 | a great deal
5 |
| 7. How close do you feel to your child regarding his or her career development? | not close
1 | 2 | 3 | 4 | very close
5 |

PARENT QUESTIONNAIRE
APPENDIX H

STUDENT QUESTIONNAIRE

INSTRUCTIONS: Please circle the rating which best describes the present situation concerning your career.

- | | | | | | | | |
|---|----------------------|---|---|---|---|---------------------|---|
| 1. To what extent do you know about your interests, strengths and values? | am not aware | 1 | 2 | 3 | 4 | am very aware | 5 |
| 2. To what extent are you aware of the different career options and how to attain them? | am not aware | 1 | 2 | 3 | 4 | am very aware | 5 |
| 3. To what extent are you capable of making sound career decisions? | not capable | 1 | 2 | 3 | 4 | very capable | 5 |
| 4. To what extent do you pay attention to your parent's ideas regarding your career plans? | do not pay attention | 1 | 2 | 3 | 4 | pay close attention | 5 |
| 5. To what extent do you and your parent(s) discuss career ideas freely in a give and take way? | not freely | 1 | 2 | 3 | 4 | very freely | 5 |
| 6. To what extent are you able to mutually influence one another when discussing careers? | not at all | 1 | 2 | 3 | 4 | a great deal | 5 |
| 7. How close do you feel to your parent(s) regarding your career development? | not close | 1 | 2 | 3 | 4 | very close | 5 |

TELEPHONE INTERVIEW

Introduce self and thank them for participation.

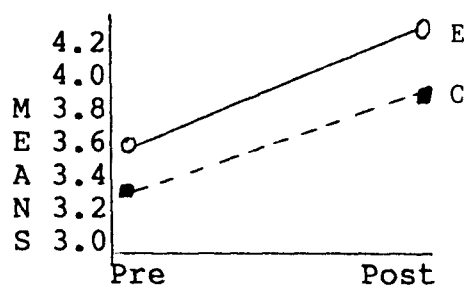
1. How di the program go?
2. How did you and your child benefit from the program?
3. Is your child more aware of occupations and the options available to him or her?
4. Does your child know more about him/herself in the area of careers?
5. How capable is your child of making a career decision?
6. What part of the program did you enjoy the most? Why?
7. What part of the program did you enjoy the least? Why?
8. Did you learn anything about your son/daughter as far as careers go?
9. Did you learn anything about your relationship with.... by doing the program? (Expand: attention, balance of power, reciprocity)
10. Any other comments?

1. Who was involved? Some family background.
2. I was wondering how the program went? Can you tell me how you got started?
3. Was there anything in the program that helped your child with his or her career planning? Anything that hindered this?
(SPECIFIC INCIDENTS)
4. To what extent does your child know him or herself now that the program is done?
5. To what extent is he or she capable of making a career decision?
6. How have you and your child benefitted from the program?
7. What was it like doing the program together?
8. Did anything specific happen that brought you closer together or farther apart?
9. To what extent do you know your child better? What do you think contributed to this?
10. Let's go over the program in detail. Can you tell me how the following went:
 - a. Parent's Manual
 - b. Part One
 - c. Part Two (DETAILS)
 - d. Part Three
11. Suggestions for improvement?
12. Additional comments

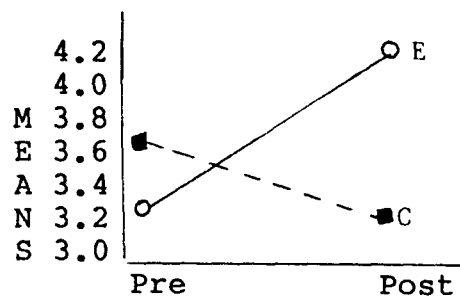
APPENDIX K

Treatment by School Effects for Students
(Questionnaire: Career Maturity)

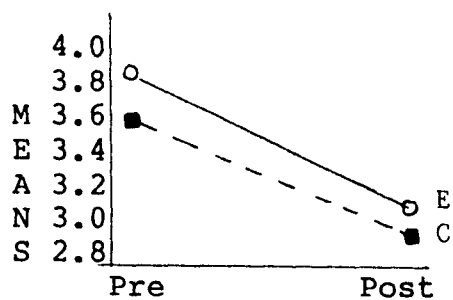
4.a School One



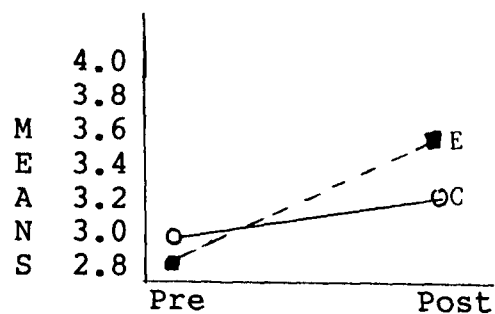
4.b School Two



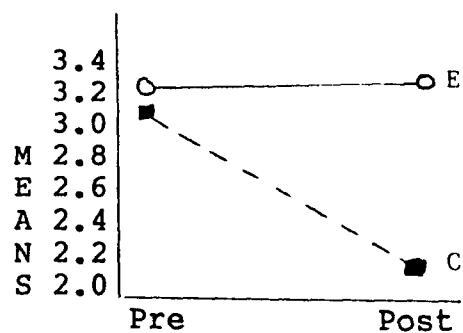
4.c School Three



4.d School Four



4.e School Five



APPENDIX L

Summary of Multivariate Tests for Parents

Source	DF	T ²	Probability
Between Groups			
Treatment (T)	4,27	2.22	.09
School (S)	16,102	1.60	.08
T X S	16,102	.90	.14
Within Groups (Occasion(O))			
O X S	16,102	.97	.50
O X T	4,27	3.00	.03
O X T X S	16,102	1.38	.16

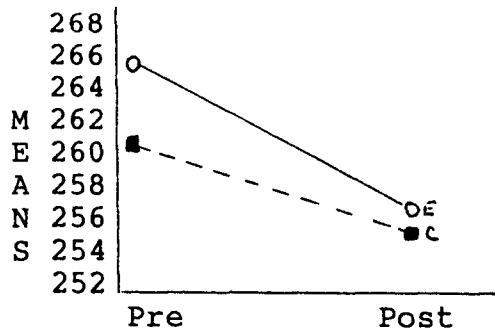
APPENDIX M

Summary of Univariate Tests for Parents(Occasion X Time)

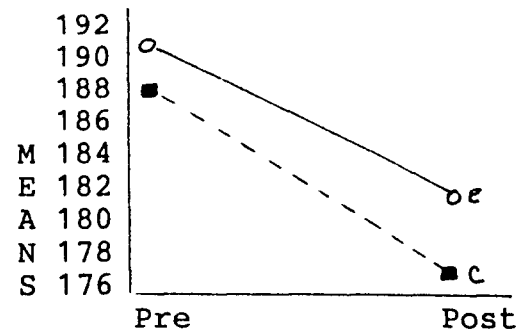
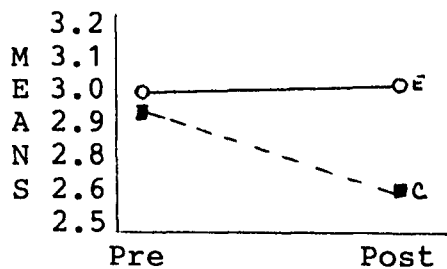
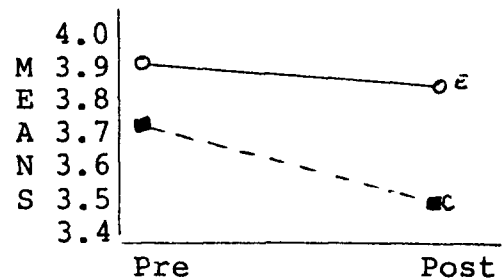
<u>Dependent Variable</u>	<u>DF</u>	<u>F</u>	<u>Probability</u>
Family Adaptability (FACES)	1,30	.26	.61
Family Cohesion (FACES)	1,30	2.17	.15
Career Maturity (QUESTIONNAIRE)	1,30	10.47	.003
<u>Dyadic Formation(QUESTIONNAIRE)</u>	<u>1,30</u>	<u>2.69</u>	<u>.11</u>

Combined Observed Means for Treatment Effects for Parents
on Outcome Variables

3.a FACES (Cohesion)



3.b FACES (Adaptability)

3.c QUESTIONNAIRE
(Career Maturity)3.d QUESTIONNAIRE
(Dyadic Formations)

Summary Table of Student Mean and Standard
Deviation Scores on the CDI, FACES, and Questionnaire
Scales According to Schools

Scale	Schools				
	A	B	C	D	E
CDI Pre	104.75	103.00	98.75	121.75	106.00
COT	14.93	15.76	22.54	9.94	16.57
Post	119.25	105.25	100.00	125.25	117.75
	8.38	22.1	24.34	6.18	3.77
FACES					
FA Pre	185.50	175.25	189.75	176.75	184.25
	4.93	19.1	27.98	10.56	5.05
Post	189.00	173.75	190.20	186.25	188.75
	5.71	17.36	31.72	13.09	10.87
FC Pre	258.00	237.00	233.75	270.75	247.25
	16.1	25.25	34.0	15.8	20.82
Post	258.00	242.75	237.50	272.75	257.25
	13.29	27.58	37.0	18.9	22.60
QUEST- IONNAIRE					
DYAD Pre	3.68	2.94	2.75	3.25	2.56
	.80	.31	.84	1.32	.82
Post	4.12	3.37	2.81	3.56	3.25
	.59	.32	1.24	1.21	.45
CM Pre	4.08	3.25	3.08	3.33	2.16
	.74	.57	.50	.61	.96
Post	4.83	4.00	3.00	3.58	3.16
	.63	.86	.67	.88	.43

Note: Abbreviations: CDI = Career Development Inventory; COT= Career Orientation Total; FACES= Family Adaptability and Cohesion Evaluation Scales; FA= Adaptability; FC= Cohesion; DYAD= Dyadic Formations; CM= Career Maturity.

Summary Table of Mean and Standard Deviation
Scores of Parents on FACES and QUESTIONNAIRE Scales
According to Schools

Scale		Schools				
		A	B	C	D	E
FACES						
FA	Pre	178.25 5.73	172.50 4.03	178.75 14.10	181.25 25.09	172.25 6.99
	Post	186.75 3.77	176.00 4.54	177.75 11.92	185.00 21.22	180.00 7.48
FC	Pre	255.75 10.24	249.00 9.30	259.75 18.24	249.75 16.35	264.00 19.61
	Post	256.50 15.25	251.50 7.59	252.00 29.4	252.00 19.54	269.75 16.00
QUESTIONNAIRE						
DYAD	Pre	3.56 .86	3.93 .74	3.31 .42	3.25 1.08	3.37 .59
	Post	4.12 .59	4.18 .74	2.93 .94	3.68 .98	3.93 .42
CM	Pre	2.75 .78	2.66 .72	2.58 .99	3.08 .83	2.10 .27
	Post	3.42 .73	3.33 .66	2.33 .90	3.50 1.00	2.96 .17

Note: Abbreviations: FACES = Family Adaptability and Cohesion Evaluation Scales; FA = Adaptability; FC = Cohesion; DYAD = Dyadic Formations; CM = Career Maturity.

Distribution of Child Perceptions of Family
Types According to the Circumplex Model

COHESION

	<u>Disengaged</u> (162-234)	<u>Separated</u> (235-268)	<u>Connected</u> 269-306)	<u>Enmeshed</u> (307-378)	
<u>Chaotic</u>					PRE
A (239-294)					POST
D					
A					
P <u>Flexible</u>			1 (5%)		PRE
T (210-238)			1 (5%)		POST
A					
B					
I <u>Structured</u>	2 (10%)	10 (50%)	2 (10%)		PRE
L (183-209)	0	10 (50%)	6 (30%)		POST
I					
T					
Y <u>Rigid</u>	2 (10%)	2 (10%)	1 (5%)		PRE
(126-182)	2 (10%)	1 (5%)	0		POST

Adaptability:

PRE:

Experimental Group

Mean: 182.30

Control Group

Mean: 186.11

POST:

Experimental Group

Mean: 185.55

Control Group

Mean: 186.34

Cohesion:

PRE:

Experimental Group

Mean: 251.99

Control Group

Mean: 254.60

POST:

Experimental Group

Mean: 254.25

Control Group

Mean: 251.40

Distribution of Parent Perceptions of Family
Types According to the Circumplex Model

		COHESION			
		<u>Disengaged</u> (162-234)	<u>Separated</u> (235-268)	<u>Connected</u> (269-306)	<u>Enmeshed</u> (307-378)
A D A P T A B I L I T Y	<u>Chaotic</u> (239-294)				PRE POST
	<u>Flexible</u> (210-238)			O 1 (5%)	PRE POST
	<u>Structured</u> (183-209)	O 2 (10%)	5 (25%) 6 (30%)	1 (5%) 2 (10%)	PRE POST
	<u>Rigid</u> (126-182)	1 (5%) 0	12 (60%) 8 (40%)	1 (5%) 1 (5%)	PRE POST

Adaptability:

PRE:

Experimental Group

Mean: 182.25

Control Group

Mean: 187.95

POST:

Experimental Group

Mean: 186.17

Control Group

Mean: 191.25

Cohesion:

PRE:

Experimental Group

Mean: 253.10

Control Group

Mean: 260.70

POST:

Experimental Group

Mean: 261.02

Control Group

Mean: 265.80

APPENDIX R

Pretreatment Intercorrelations Among Dependent Variables

	FA	FC	Q(CM)	Q(Dyad)	COT
FA					
FC	.279**				
Q(CM)	.039	.085			
Q(Dyad)	.055	.173	.388**		
COT	.157	.262*	.021	.088	

Note: Abbreviations: FA = Family Adaptability (FACES); FC = Family Cohesion (FACES); Q(CM) = Career Maturity Items of the Questionnaire; Q(Dyad) = Dyadic Formation Items of the Questionnaire; COT = Career Orientation Total of the CDI.

** $p < .01$

* $p < .05$