FROM ADOLESCENCE TO ADULTHOOD: A STUDY OF THE RELATIONSHIP BETWEEN SOCIAL FACTORS AND OUTCOME FOR YOUNG PSYCHIATRIC PATIENTS

by

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ABSTRACT

Adolescents who were admitted to the Adolescent Psychiatric Unit at Vancouver General Hospital for assessment between 1981 and 1983 who were queried to be in the process of developing a long term psychotic illness were followed retrospectively after five to seven years. At the time of assessment the subjects were between 13 and 16 years of age. The study was intended to act as a pilot project for a larger study.

In tune with a biopsychosocial emphasis, outcome was defined as a multi-directional and multi-dimensional concept, involving both positive and negative outcomes in a variety of dimensions. Independent variables were drawn from a structured interview which pertained to the subjects' experience with family relationships, peer relationships, use of treatment resources, educational and employment achievement, drug and alcohol usage, legal difficulties, and quality of life issues since their hospitalization. Three structured outcome measures were used as dependent variables. These included scales which assessed current levels of family functioning, satisfaction and happiness, and community adjustment. Bivariate analysis was conducted using SPSSX:3.

The resulting description of the population indicated a heterogeneous group with a variety of outcomes. Although some of the subjects fit the profile for chronic mental illness, diagnosis did not predict outcome. Positive outcome appeared to be associated with stability in overall family functioning, and in particular with the subjects' reports of a positive relationship with their fathers; with the ongoing use of

treatment resources; with ease in establishing peer relationships; with self-motivatioin in the area of employment; and with the ability of subjects to move from alternate school settings back into the regular system. Subjects who described their families as having problems with control issues and with task accomplishment appeared to have had trouble in a number of areas during the intervening couse.

Acceptance of the need for ongoing treatment was associated with the subjects' characterization of their families as being within norms for social values and norms at the time of outcome, suggesting the tendency of families and treatment personnel who have similar values to ally.

Subjects who had had minimal or sporadic contact with treatment resources described their families as being weak in most areas of functioning, and in particular in the area of values and norms.

The findings suggest several avenues for further exploration in a larger study. They also support a consideration by treatment resource personnel of the need to involve families as resources in the treatment process, and point to areas in which treatment interventions can be made.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF APPENDICES

Dedication

May, 1990.

To the memory of my beloved grandmother, Mrs. Anna May Boak Moore who nurtured and inspired me through my academic struggle.

Chapter 1

INTRODUCTION: PROBLEM FORMULATION AND RATIONALE FOR THE STUDY

There is no area that is more fraught with controversy or characterized by competing theories than that of mental illness. Disagreement exists regarding the causes as well as the course of psychiatric disorders, as theorists place varying emphasis on the role of genetics, experiential trauma in childhood, disruption of developmental processes, and the ongoing impact of environmental factors. Although most of the theory in this area has been developed within the context of life in Western industrialized society, several researchers have established that there is considerable cross-cultural variance in the understanding, expression, and treatment of mental illnesses. These findings have resulted in the need to qualify concepts such as chronicity to their cultural context, and to look at how various societies accept or stigmatize individuals who are labelled mentally ill. In the North American experience, severe and persistent psychiatric symptoms are generally assumed to predict a chronic course for individuals who will require intermittent periods of hospitalization, ongoing treatment in outpatient settings and long-term support from social service agencies.

The consideration of social and familial factors in the development of mental illness, the evaluation of the chronically mentally ill as a population whose functioning is impaired in relation to the environment, and the acceptance of the need of this population for ongoing assistance from the social service network, clearly places the study of mental

illness into the scope of the social work profession. Research which is able to clarify factors that contribute to positive outcome in a population considered to be at risk to develop a long-term pattern of dysfunction, as well as those which might contribute to negative outcome, has much to offer to professionals who work in the field.

A retrospective follow-up study of high-risk teenagers who were assessed on the Adolescent Psychiatric Unit at Vancouver General Hospital between 1981 and 1983 was thus undertaken to add to knowledge in this area. At the time of hospitalization the young people who participated in the research were between 13 and 16 years of age. They were considered to be at high risk to develop long term patterns of dysfunction since each had either had a psychotic episode which precipitated admission to the Adolescent Unit, or was questioned to be in the early stages of developing a psychotic illness on the basis of some abnormality in behaviour. As well as providing descriptive information about the sample in general, the study was intended to examine the variability within the sample with regard to positive and negative outcome. Since few long-term follow-up studies have been conducted with this population, and since none have been undertaken at Vancouver General Hospital, the present study was also intended to serve an exploratory purpose in its attempt to clarify factors which are most relevant to outcome.

As a long term employee of the Adolescent Unit, the researcher was present when the subjects were hospitalized, and thus had access to information collected during the assessment process. The current study was undertaken at the request of the Unit's Clinical Director, as a pilot study for a larger project. As well as pointing the way to future

research, the study is intended to provide information to Unit staff which might be helpful to either treatment approaches or program formation.

The study assessed outcome in terms of the subjects' perceptions of how satisfied they were, of how adjusted they were to life in the community, and of how their families were functioning, at the time that the interviews were conducted. Because the family is held to play a critical role in promoting the completion of developmental tasks, and is seen as the best potential resource for a teenager suffering from psychiatric symptoms, an outcome measure which allows for an in-depth analysis of family functioning was used. It was hoped that preventive strategies could be considered once a better understanding of the association of various areas of the subjects' lives to family strengths and weaknesses was developed. The intent was also to provide information which might help to offset some of the criticism which families who have children who suffer from psychiatric symptoms often experience.

Other outcome measures used in the study included a satisfaction and happiness scale and a community adjustment scale. At the time of outcome subjects were also asked to discuss what had happened in several areas of their lives during the intervening course since their hospitalization on the Adolescent Unit. These areas were assumed to have some association with their outcome status. They included education, employment, residential stability, ongoing treatment, relations with family members, peer relations, life satisfaction, drug and alcohol use, involvement with the law, and quality of life. Particular emphasis was placed on the role that people who supported the subjects' efforts played in relation to achievement in each of these areas. Because the study follows the

subjects retrospectively from early adolescence until young adulthood, the findings are placed within the context of a crucial developmental phase, since the primary task of adolescence is that of identity formation.

This study sought to understand the outcome of subjects considered to be at high risk to have ongoing social and emotional difficulties in terms of sociodemographic (rather than clinical/diagnostic) variables. The intent was to use a model which is intrinsic to social work to evaluate the outcome of the subjects, i.e., the biopsychosocial model, which is concerned with people-environment transactions, rather than the medical model, which focuses on pathology. Biopsychosocial theory assumes interdependence and interrelatedness among all areas of human life. It emphasizes transactional processes in which people shape their environments and are in turn shaped by them. Stressful events are held to be a natural part of life, and coping processes are understood to either increase the risk of poor adaptation, or to improve adaptation (Germain, 1981). Genetic and temperamental influences and the influence of social networks and close personal relationships are perceived to play an important role in relation to coping (Rutter, 1988). In contrast, the medical model, which is also known as the "disease" model, describes psychopathology in terms of behavioural, psychological or physical symptoms, and assumes that abnormalities and disorders are produced by specific causes (Maltbie, 1983). The major goal of the study was thus to assess which environmental factors were associated with what kind of outcome, rather than to focus on signs or symptoms of apparent pathology.

Aside from evaluating which subjects had better and which poorer adjustment at outcome, another of the goals of the study was to determine

which of the subjects actually did develop schizophrenia or another chronic mental illness, and to assess how these subjects were functioning in relation to the others. Since the age of onset for schizophrenia for many people is during adolescence, it was assumed that some of the subjects would have been in the process of developing this illness at the time of their hospitalization on the Adolescent Unit. It was hoped that the research would provide Unit staff with descriptive information which might help with the assessment of vulnerable teenagers, and would point the way to future research.

As E. Fuller Torrey (1984) notes, however, schizophrenia is one of the most sinister words in the English language. As a result, the impact of the label of schizophrenia, or of mental illness, is likely to play a role in the outcome of vulnerable individuals. The research was thus also intended to evaluate which of the subjects actually accepted the mental illness lablel, and how these subjects functioned in relation to the others at the time of outcome.

Chapter 2

LITERATURE REVIEW

This study sought to evaluate the outcome of a number of adolescents at risk to develop a chronic mental illness five to seven years after their first admission to hospital for serious psychiatric symptoms. Although few long-term studies have been conducted with a similar population, and fewer still have looked at the association between social factors and outcome status, there are several bodies of theory and areas of research which are relevant to a discussion of the current findings.

The literature review attempts to show that chronic mental illness is a biopsychosocial concept which is difficult to define, as well as to establish that the DSM III-R is a descriptive rather than a predictive tool. It also presents current theory on adolescent development, and discusses the emergence of psychosis in adolescence, as well as the association between family functioning, adolescent development, and the emergence of psychosis in adolescence.

With regard to research which has been conducted, the literature review provides an overview of follow-up studies which have been undertaken with psychiatric populations. It examines several long-term studies; reviews the original "expressed emotion" studies which found that factors in the family environment were associated with relapse following the patient's return from the hospital; evaluates the findings of "high risk" studies which followed children who were at risk to develop mental illness prospectively; looks at a study which evaluated stressors in a normative adolescent population; outlines an overview conducted by

Pfeiffer (1989) of child and adolescent follow-up studies; and finally attempts to convey an understanding of labeling theory and its relevance to the present study. Although none of the studies reviewed follows the format of the current study, each suggests avenues for exploration.

A. Theory

(i) Chronic mental illness

Where chronic illness begins, and how it evolves, remains unclear. Health and Welfare Canada (1988) acknowledges that a better understanding of the distribution, causes, and risk factors associated with mental illness is required, and recommends an intensification of the research effort. In order to facilitate intervention before the illness becomes chronic, early diagnosis is essential, since chronic illness is often the result of many causes interacting over time (Larkin, 1987).

Mental illnesses are particularly complex not only because physical, biologic, psychosocial, spiritual, and political influences play a role in their development (Larkin, 1987), but also because their course is unstable. As a result, the frequent remissions and recurrences associated with these illnesses place additional stress on the coping resources of both the people who suffer from them and family members (Lamb, Hoffman, Hoffman, & Oliphant, 1986). Environmental factors which further compound the problems of both people who suffer from the illnesses and people who provide support for them include the effects of institutionalization and of stigmatization by the larger community.

There is disagreement regarding the definition and extent of chronic mental illness. Toews and Barnes (1986) define the chronic mentally ill

as "persons suffering from a mental or emotional disorder that is long-term and produces serious psycho-social difficulties that sharply limit their ability to interact with their environment in such a way as to sustain themselves or relate competently to others". There are specific problems experienced by people with chronic schizophrenia, organic brain syndrome, chronic affective disorder, or personality disorder, all of which comprise the chronic population. As these authors point out, however, much of the literature defines the chronic group loosely, and fails to either specify the diagnostic characteristics of the group being studied, or when a diagnosis is made, to define the criteria for making it.

Bachrach (1988) notes that the meaning of chronicity eludes mental health service planners and researchers, since the notion of persistence lacks a clear empirical referent. One researcher may infer persistence from a certain specified diagnosis, while another may use the term to refer to an individual's experience of active symptoms associated with his or her illness. Yet another may use the term to refer instead to the functional disabilities that result from having the illness. Bachrach also acknowledges that it is becoming increasingly clear that the two events, illness and disability, are neither synonymous nor coterminous. Some people, she states, may remain disabled long after the primary symptoms of the illness have disappeared. Others may suffer more from tertiary disabilities, or "social disablements", which are extrinsic to the individual and have their roots in societal reactions rather than in the illness itself.

In her discussion of culture and chronic mental illness, Lefley (1990) establishes that "chronic mental illness" is a North American construct which characterizes a functionally impaired population which requires occasional crisis stabilization and hospitalization and has ongoing needs for outpatient care and long-term rehabilitation. In her attempt to understand why people in developing countries have a better prognosis for mental illness than those in the West, Lefley suggests that world view, religion, alternative healing resources, values of interdependence, extended kinship structure, family support, and professionals' willingness to work collaboratively with families are cultural strengths which may help to mediate the course of mental illness (Lefley, 1990).

In light of the differences in opinion, it is not surprising to find that estimates regarding the extent of chronic mental illness are discrepant. Toews and Barnes (1982) estimate that there are approximately 200,000 people with fairly severe mental illnesses in Canada, with about 60,000 of these diagnosable as chronic schizophrenic. A recent article in Maclean's Magazine (Nichols, Schug, Argon, Black, Gregor & Lowther, 1988) indicates that schizophrenia afflicts more than 200,000 Canadians. British Columbia's Mental Health Consultation Report (1987) defines chronic mental illness in terms of "long lasting symptoms and disabilities, repeated treatment episodes, dependent life style, and a need for indefinite community support services". This report estimates that up to 30 percent of the population experiences a significant psychiatric disorder at some point in their lives, up to 20 percent at any particular time, and that five percent suffer from a major mental illness.

Although there is considerable disagreement over which psychiatric conditions or diagnoses might qualify an individual as being chronically mentally ill, conditions which are characterized by psychosis generally raise little question (Bachrach, 1988). The Diagnostic and Statistical Manual of Mental Disorders III-R (1987) establishes diagnostic criteria for a variety of mental disorders which are conceptualized as clinically significant behavioural or psychological syndromes or patterns that are associated with either distress or impairment in one or more important areas of functioning. It includes 15 disorders which have psychotic features, as well as several personality disorders which may have occasional psychotic episodes associated with them. The DSM III-R is not precise about the boundaries for establishing conditions as mental disorders, however, does not assume mental disorders to be discrete entities, and in general does not discuss theories pertaining to the etiology of various conditions. Both biologic constitutional defects and traumatic psychological developmental effects are held to play a role in the development of these illnesses, but it is not clear how this happens.

(ii) Adolescence as a developmental stage

In order to appreciate how the development of psychiatric symptoms in adolescence might predict a long term pattern of mental illness, it is important to understand adolescence as a developmental phase.

Developmental theorists have described adolescence as a stage which is marked by changes in biological, psychological, and social functioning (Eisenberg, 1969). Tasks of this stage include separation from family and the establishment of identity, the development of new and meaningful

relationships with same and opposite sex friends, and the selection of life tasks and goals (Mahon, 1983). Eleanor Maccoby (1988) suggests that relationships in adolescence are characterized by a gradual shift from dependence on external guidance to reliance on self-regulation, with a decline in the attachment to parents and an increased reliance on peers to provide support, a process which lays the groundwork for satisfying relations in adulthood. Success in completing developmental tasks results in health and well-being, while failure leads to the development of pathology.

The most noted theorist in this area, Erik Erikson, attributes the development of the ability to make reliable commitments in young adulthood to a successful resolution of the adolescent struggle for identity (Erikson, 1982). The basic patterns of identity, he maintains, must emerge from the selective affirmation and repudiation of an individual's childhood identifications, as well as from the way in which the social process of the times responds to young individuals. Society can feel deeply and vengefully rejected by the individual who does not seem to care to be acceptable, declares Erikson. According to Erikson's theoretical framework, the successful resolution of adolescent developmental tasks leads to identity formation and promotes the capacity of the individual to have faith in moving from a position of reliance on parental guidance to one which accepts help from mentors and leaders. Those who cannot make a successful transition are left in a state of identity confusion distinguished by role repudiation, which is characterized by either diffidence or defiance. These adolescents tend to form a negative

identity, in which they combine socially unacceptable and yet stubbornly affirmed identity elements.

In Erikson's view, as adolescents mature into young adulthood they are eager to develop their capacity for intimacy, as their search for identity leads to a desire to share themselves with individuals who promise to provide complimentarity. The psychosocial antithesis to intimacy is isolation, a fear of remaining separate and unrecognized. Erikson defines a sense of isolation as the potential core pathology of early adulthood, and maintains that the greatest danger of isolation is a regressive and hostile reliving of the identity conflict. While the resolution of the antithesis between intimacy and isolation is realized in the development of the capacity to love, according to this theory, the inability to resolve the conflict results in exclusivity and rejectivity, including excessive self-rejection (Erikson, 1982).

(iii) Psychosis in adolescence

It is difficult to distinguish symptoms of a developing mental illness from those which might point to the existence of problems in carrying out developmental tasks in adolescence. Because adolescents have not yet achieved adult levels of cognitive maturation and are less likely than adults to have achieved a stable personality style, they are more likely than adults to present with a mixed symptom picture in which symptoms of a psychiatric disorder are secondary to or even obscured by, other problems or complaints. A teen who shows signs of depression, or who is failing at school or demonstrating antisocial behaviour, may in fact be in the early stages of developing schizophrenia or another chronic

mental illness (Weiner, 1987). Conversely, an adolescent who is experiencing an acute psychotic episode, or psychotic-like symptoms, may be suffering from intrapsychic conflict resulting from environmental stressors, rather than from an illness which will maintain over time.

Sadi Bayrakal (1988) defines psychosis as the loss of contact with reality. It is not a disease entity, he maintains, but a sign and symptom complex which in its most common form may be a perception without any objective internal or external stimuli (hallucination), or a false belief or way of thinking that persists despite irrefutable evidence to the contrary (delusion). If the condition lasts for less than six months it is considered to be acute, and if for more than six months, chronic. The causes of psychotic conditions are considered to be biologic, psychologic, social, or a combination of the three, and various theories exist as to their course, for which the onset may be acute or insidious (Bayrakal, 1988).

E. Fuller Torrey (1984) elaborates on some of the factors which promote confusion in the understanding and treatment of schizophrenia. Unlike almost all other diseases, which can be identified by the presence of certain bacteria or changes in blood chemistry that can be seen or measured, he states, nothing has yet been found which can be reliably measured to prove the existence of schizophrenia, an illness which then must be diagnosed according to symptoms alone. The practice of defining a disease by its symptoms is unreliable, he continues, not only because numerous disorders may have the same symptoms, but also since clinicians may disagree about which symptoms are required to confirm a diagnosis. Although there is general agreement that the diagnosis of schizophrenia

can be made when psychotic symptoms have existed for more than six months, problems with diagnosis persist, since diagnosis remains based on the psychiatrist's subjective evaluation of the patient's behaviour, and on what patients say they are experiencing. Current theory, as summarized by Torrey, suggests that schizophrenia is a disease of the brain which affects the limbic system and its connections, that it often runs in families, and that in some instances it has been shown to be linked with brain damage which occurred very early in life. Some researchers support the vulnerability-stress hypothesis, speculating that the disease of schizophrenia is not itself inherited, but that some people inherit a predisposition to react to environmental influences in some particular way that leads to schizophrenia. Three-quarters of those who develop schizophrenia do so between the ages of 17 and 25. An initial onset before age 14 or after age 30 is unusual, and males are more likely to have an earlier age of onset and a more severe form of the illness than females (Torrey, 1984).

Feinstein and Miller (1979) estimate that at least ten to fifteen percent of the adolescent population will at some point in their development manifest a reaction requiring diagnostic evaluation or treatment. Statistical reports of inpatient programs indicate, they claim, that approximately ten percent of admissions are labeled as psychotic reactions, while a further ten percent are diagnosed as adolescent schizophrenia. These authors hold to a view which was popularized in the 1960s and 1970s, which has met with widespread criticism over the last several years, attributing severity in developmental deficits to severity of impairment in the mother-child

relationship. Later stages of growth for children whose development has been severely disrupted, they maintain, are likely to be characterized by a failure of integration of the personality, disturbances in social relationships, failure to form a sense of identity, and the development of a psychotic process (Feinstein & Miller, 1979).

(iv) Family functioning and the emergence of mental illness in adolescence

Family systems theorists emphasize the importance of the influence of the family's evolution through the life cycle, as well as its structure, composition, and functioning on the way that individuals cope with specific developmental tasks (Preto & Travis, 1985). In their early work, proponents of systems theory viewed psychosis and schizophrenia as a symptom of family pathology, and in particular concentrated their efforts on understanding how the mother-child relationship promoted psychotic breakdown (Bateson, 1968; Jackson & Weakland, 1968; Bowen, 1978). Unfortunately, the tendency to blame families is still a problem among numerous professionals who treat adolescents and their families. For example, McFarlane (1982) asserts that "most families with a psychotic member are enmeshed". He proposes a treatment model in which a number of families are seen together, suggesting that single families become more involved when a family member is hospitalized for psychosis and promote relapse, and that multiple-family therapy is a means to encourage disenmeshment.

In her discussion of family mental health, Rae Sedgwick (1981) describes several components of healthy family functioning. Sedgwick

describes the family as a "social and psychological arena in which individuals learn values, take on beliefs, absorb attitudes, initiate and imitate actions, and practice ways of behaving". As a social organization, she continues, the family's purpose is to develop in its members the skills necessary for productive membership in a larger social system. School and work are components of that larger system. In addition to its role as a social organization, the family also has responsibility as an emotional and psychological environment to create an atmosphere which is conducive to both group living and individual development. Factors which contribute to how a family resolves its difficulties include family history, societal and cultural processes and expectations, individual makeup and ability, and environmental contingencies, states Sedgwick. These patterns are manifested in how the family processes information, makes decisions, shares emotions, manages conflict and individuation, and demonstrates productivity and flexibility (Sedgwick, 1981).

Sadi Bayrakal (1987) suggests that the impact of the current sociocultural atmosphere on family functioning has been an increase in emotional difficulties and behaviour problems in young people in Western countries. In general, Bayrakal maintains, adolescents engender anxiety and hostility in the adult world, leading adults to retaliate by shaming, reproaching and provoking youth. An adolescent who cannot complete the separation-individuation process within the family structure is thus likely to turn to peers to do so (Bayrakal, 1987).

Dorothy Orr (1989) points out that young people who are hospitalized for psychosis are not only extremely ill, but are also having difficulty

processing information. Because their families are suffering from emotional distress and a sense of loss, they may often appear to be dysfunctional, as may any family in an acute or chronic state of crisis, she maintains (Orr, 1989). Problems are likely to be compounded by professionals who are not aware of their need to support the family as part of the treatment process, or who become competitive with families who attempt to involve themselves in treatment (Harbin, 1982).

Harriet Lefley (1990) supports these views in her extensive review of research which has been conducted into the relationship between cultural factors and chronic mental illness. She acknowledges that mental illness in one member may sap the adaptive capacities of a strong family system, and emphasizes the need for treatment systems to both offer family educational programs and to involve families in collaborative roles. In fact, she maintains, the international psychiatric literature indicates that families are considered to be both allies and integral components of the treatment process in most of the world, while it is primarily in the West that they have been excluded or treated as toxic agents (Lefley, 1990).

(v) Summary

Although the theories discussed raise more questions than they answer, they do point to the following conclusions.

(a) Despite the considerable controversy which surrounds the definition of mental illness, it is predictable in Western society that people who accept a diagnosis for chronic mental illness will require occasional hospitalization and ongoing treatment. Early diagnosis is

essential so that preventive strategies can be developed. Early diagnosis may in fact be unreliable, however, since mental illness is difficult to diagnose in adolescents.

(b) Adolescence is a critical developmental stage in which young people focus on the formation of their identities and the selection of their life tasks. Families and other social influences are understood to play roles in the adolescents' success or failure in completing development tasks.

(c) Symptoms of a developing mental illness are difficult to distinguish from those which point to problems in achieving developmental goals.

(d) Families who have a child or adolescent suffering from psychiatric symptoms have traditionally been held responsible for the illness. The mother-child relationship in such families has typically been seen to be enmeshed.

(e) Current theory and international psychiatric theory suggests that families are likely to be the best resources for their ill members.

The theories cited in the literature review support the focus of the current study on assessing the subject's interaction with family members and on using family functioning as a measure of outcome. They also support the decision to conduct research in an area which has been typically controversial but under explored.

B. Research

(i) The relevance of follow-up studies

Although there are currently major gaps in our understanding of the origins and development of mental illnesses, several researchers have advocated the need for research studies which follow subjects who appear to be in the process of developing such illnesses over time. Nuechterlein (1987) suggests that longitudinal research on subjects at risk to develop a chronic illness is required in order to identify fundamental precursors that could be the target for preventive intervention. Dunner (1987) supports the collaboration of medical psychiatry and the social sciences in studying environmental factors that relate to the onset of illness. Rutter (1984) emphasizes that it is now generally accepted that the life cycle does not follow an invariant sequence with outcomes that are strongly predictable from early behaviour or early experiences. He endorses, however, the need for research which considers links between childhood and adult life with special reference to the childhood antecedents of adult psychiatric disorders, and to the broader question of continuities and discontinuities in personality development. A concern to identify childhood antecedents does not mean that they exist, he cautions, but knowledge of whether or not such antecedents do exist is likely to throw light on the nature of adult mental disorder, and on the processes involved in its causation.

Although some researchers (Nuechterlein, 1987; Strober & Carlson, 1981) support the use of prospective studies, Wing (1978) argues that the concept of course can be applied retrospectively, taking into account a large number of influences that might have been important, and

endeavouring to reach a judgment as to what actually did play a part in deciding the outcome. Ledingham and Crombie (1988) discuss several studies which show that psychological adjustment in childhood and adolescence is a result of the influence of clearly specifiable conditions, and that behavioural markers can be identified. They also review studies which show how potentially pathogenic circumstances can be reversed and positive skills developed to promote mental health. They suggest that early secondary prevention may be more effective and cost-efficient than primary prevention.

(ii) Long term studies conducted with adults

Dr. R. Manderscheid, the Chief of the Survey and Reports Branch for the National Institute of Mental Health (1987) contends that although detailed knowledge about the clinical course of major psychiatric disorders is extremely important in order for effective interventions to be designed, research to develop this information has been rare. Since people who suffer from such disorders experience a variety of long-term outcomes, he states, research on factors that influence outcome is a high priority. Manderscheid cites a study conducted by Harding et al. (1987) which found that diagnosis is not an accurate predictor of outcome. This study is a long-term follow-up study of 82 patients from the Vermont State Hospital who, when rediagnosed retrospectively, met DSM-III criteria for schizophrenia at their index hospitalization in the mid-1950s. A five to ten-year follow-up study had found that two-thirds of these patients were out of the hospital but were expected to require continuous support by the mental health system to remain in the community.

In the recent follow-up, raters who were blind to previously recorded information about the subjects conducted two structured and reliable field interviews with each subject to ascertain current status and longitudinal patterns of community tenure. Additional informants who knew each subject well were also interviewed, and the ratings were verified. Another structured protocol was used by a rater blind to all field information to abstract hospital and vocational rehabilitation records.

The interviewers also made ratings that provided a current clinical profile for each subject using several reliable rating scales. The Global Assessment Scale was used to provide a single score based on level of symptoms and social functioning, and the Strauss-Carpenter Level of Function Scale was used to identify some of the major components that constitute the overall level of functioning assessed by the GAS.

The outcome for one-half to two-thirds of these subjects was found to have evolved into various degrees of productivity, social involvement, wellness, and competent functioning, despite expectations to the contrary. Of the 84% of the 82 subjects who had had psychotropic medications prescribed for them, about 25% always took their medications, another 25% self-medicated when they had symptoms, and the remaining 34% used none of their medications. Within the middle range of outcome were subjects who were considered to be functioning well (e.g., working, with good family relationships and friends) despite the fact that they still had delusions or hallucinations. Other subjects either worked and lacked supportive relationships, or had extensive social networks but did not work. The picture was found to be a complex and heterogeneous one.

Although the study has limitations, including a bias toward selection of the long-term institutionalized patient, strong evidence for the limited usefulness of current diagnostic classification systems in accurately predicting long-term outcome was provided. In light of this finding, Manderscheid emphasizes the need for investigation into factors other than diagnosis that might influence outcome, including psychosocial and vocational functioning before and after the onset of the disorder, and the effects of treatment and system interventions.

Outcome studies with adults have typically been conducted following a period of hospitalization. In its follow-up study of schizophrenic patients in four provincial locations, Health and Welfare Canada (1985) supports the view that outcome is a multi-dimensional concept which involves several semi-independent processes, the major ones being social relations, employment, relief of symptoms, and duration of hospitalization. Individuals may be impaired in one or more areas, but function well in others.

Another focus of follow-up studies has been on the course of the development of the illnesses. Wing (1978) describes four main elements which contribute to course. The first element is the clinical condition itself, which may be acute, intermittent or chronic; the second is the severity of chronic intrinsic impairments; the third is described as secondary handicaps which are not part of the disease process itself, but which accumulate whenever a disease is characterized by frequent relapses or by chronic intrinsic impairments (e.g., altered self-attitudes, the addition of new habits that make it difficult to carry on an ordinary life); and the fourth, extrinsic disadvantages of various kinds that would

be handicapping in their own right (e.g., poor education, low IQ, absence of social supports).

Wing discusses the difficulties in classifying psychiatric disorders, and notes that patients are often diagnosed schizophrenic in spite of the fact that some other classification, such as mania or psychotic depression, could be made on the basis of the same clinical phenomena. In his investigation of social influences on the course of schizophrenia, Wing studied long stay institutionalized schizophrenic patients in three large psychiatric hospitals. There were marked social differences between the hospitals in terms of the attitudes of the nurses, the amount of contact with the outside world, the restrictiveness of ward regimes, and the amount of time spent by patients in various activities. The three groups were followed over eight years, during which time social conditions fluctuated. Wing found that an increase of social poverty was accompanied by an increase in clinical poverty, while social improvement was accompanied by clinical improvement. Drug treatment was not related to improvement (Wing, 1978).

(iii) Expressed emotion studies

Renewed interest has also been generated in the area of researching specific family environmental variables that are reliably associated with differential long term course. In particular, the "expressed emotion" research has taken this focus. The central notion in "expressed emotion" studies is that the family environment is likely to have a significant impact on the course of the disorder, rather than on its onset, as was previously theorized. This role is assumed to come into play once the

patient returns from hospital. These studies accept the vulnerability/ stress model of schizophrenia, which suggests that schizophrenia is the result of a biological predisposition in interaction with traumatic environmental stressors.

Brown, Birley, and Wing (1972) screened the case records of all patients aged 18-64 living in an area of London whose records indicated that they might be suffering from schizophrenia. Of 118 selected, 101 participated in the study. Eight types of interviews, spread out over several months, were carried out for each patient and family, and ten were used if the patient was readmitted during the follow-up period. Two interviews to establish the current mental state of the patient and his social and clinical background were carried out by a research psychiatrist soon after the patient was admitted to hospital. The main family interview was carried out at home over two visits by a research sociologist while the patient was still in hospital. A husband or wife was always seen; two parents (or married siblings or pairs of siblings) were interviewed separately by different workers. Both the current mental state and the family interviews were repeated at the time of follow-up nine months after discharge, and comparable ratings were made. An interview involving the patient and family members took place about two weeks after discharge, in order to assess how family members interacted. The scales concerning expressed emotion were completed at the main family interviews and at the joint interview. Patients and family were also seen at any readmission during the nine months after discharge.

Following the interviews, family members were rated on the basis of the number of critical comments made about someone else in the home, on

their expressions of dissatisfaction, on their warmth, and for emotional over-involvement with the patient. Patients were evaluated for work impairment, disturbed behaviour, and social withdrawal. They were also assessed for relapse on the basis of symptoms and readmission to hospital.

Relapse was found to be significantly higher in families which had high levels of "expressed emotion", characterized by a preponderance of critical or hostile statements made by family members about the patient, or by emotional over-involvement with him or her. Dissatisfaction on the part of relatives was only associated with relapse if criticism was also present. Other factors independently related to relapse included age (under 45), sex (male), admission status (not first admission), recent occupational level (unskilled manual), decline in occupational level, and failure ever to achieve a satisfactory sexual adjustment. By dividing the patients into three groups, the first including patients who clearly fit the diagnosis of schizophrenia and the other two including patients who could have received other diagnoses, the researchers found that the first group had a worse prognosis than the other two. They thus suggested that type of clinical condition is an independent variable, leading them to question whether their findings are specific to schizophrenia.

Vaughn and Leff (1976) replicated the work of Brown, Birley and Wing in their comparison of schizophrenic and depressed neurotic patients. Patients for the study were collected on admission to one of three hospitals in South East London. Subjects were included if they were between the ages of 17 and 64, spoke English as their native language, lived with relatives at the time of admission, and appeared to fit the criteria for a diagnosis of either schizophrenia or neurotic depression.

Thirty-seven schizophrenic, and 30 depressed patients participated, representing 86% and 94% respectively of the original sample. The techniques of behavioural, psychiatric, and family measurement were identical to those used in the earlier study, although the main family interview schedule was abbreviated. High inter-rater reliability with the original interviewers was established by rating tapes from the 1972 study. Ratings were made on all the scales employed in the 1972 study. The main results of the earlier study were replicated with the schizophrenic patients, although a fewer number relapsed while on medication. Patterns of relapse in the two clinical groups were found to differ, however. Although a significant link between relatives' criticism and relapse in the depressed sample was found, depressed patients appeared to be more sensitive to criticism than the schizophrenic patients, who tended to withdraw more from, or to avoid the critical comments. The response of the relative was found to be a better predictor for relapse in both cases, rather than the severity of the illness.

Kantner, Lamb and Leoper (1987) dispute some of the findings of the "expressed emotion" studies. After reviewing the research methodology, empirical findings and treatment implications of these studies, they conclude that many of the patients had evidenced enough socially embarrassing or disturbed behaviour to evoke the negative family response, but that this interaction was not taken into account when the studies were done. These authors also suggest that over-involvement by family members may reflect accommodation to a child with a long history of social dysfunction. In their view, "expressed emotion" may be an expectable

reaction to a very difficult situation, rather than evidence of dysfunction.

(iv) High risk studies

The most prevalent type of research into childhood precursors of adult mental disorders is the prospective study of "high risk" populations. "High risk" groups include children born to a schizophrenic parent, since they have a ten to fifteen percent chance of developing schizophrenia in adulthood; adolescents evidencing non-psychotic disturbances; persons who show schizotypal personality characteristics; and people who show vulnerability indicators, such as certain information-processing abnormalities, psychophysiological anomalies, and biochemical characteristics (Nuechterlein, 1987). Although the findings are not conclusive because only a limited number of subjects within the high risk projects have been followed until they developed schizophrenia or related disorders, interim results do suggest abnormalities in several different areas of functioning. These include neurodevelopmental immaturities (clumsiness, visuospatial difficulties, verbal impairment); attention deficits (poor signal noise discrimination); and abnormalities in interpersonal relationships (odd unpredictable behaviour, rejection by peers (Nuechterlein, 1987; Rutter, 1984).

One high risk project was the Stony Brook High-Risk Project conducted by Weintraub and Neale from 1971 to 1982. This study had the largest cohort to date of prospectively studied children at risk for psychopathology, with a considerable portion of its sample representing children at risk for affective disorder. Weintraub and Neale (1984)

identified the goals of this project as: to obtain a detailed picture of the characteristics of children with a schizophrenic parent; to relate child characteristics to parental diagnosis and environmental variables in the home and school; to identify particularly vulnerable and invulnerable children; to assess the ways in which the child and family unit are affected by and cope with the stresses of psychiatric disorder and hospitalization; and to identify precursors specific to the development of schizophrenia. The framework for this project was derived from the vulnerability-stress model, with a particular emphasis on factors that might promote the vulnerability. The researchers took the position that multiple developmental pathways which lead to schizophrenia exist, rather than a single antecedent marker. A major focus of the research was the social and academic competence of the children, gathered from parents, teachers, and peers. The family environment of each child was also closely examined for evidence of "environmental noxiousness", indicators of which included marital discord, poor parenting practices, and poor sibling relationships.

The first stage of the project was cross-sectional in design. Schizophrenic and depressed parents were recruited from local mental health centres, and normal controls were selected and assessed for suitability. The sample consisted of 245 families, 94 of which included a schizophrenic parent, and 60 normal controls. Each parent was thoroughly assessed through the use of a battery of diagnostic and behavioural evaluations of current and past social functioning and psychiatric status. These included: the Current and Past Psychopathology Scale, an abbeviated version of the MMPI, and the Mate Adjustment Form. The parents were

evaluated with a reliable standardized questionnaire, the Marital Adjustment Test. Each family was assessed with the Family Evaluation Form, which includes nine scales pertaining to quality of household facilities; problems with family finances; family solidarity; marital relationship; relationship among the children; family embarrassment due to the illness; avoidance of family by others; burden of the illness on the family; and general burden of the illness on others. Parenting characteristics were assessed with the Child's Report of Parental Behaviour Inventory. Children were assessed by their schoolmates, using the Pupil Evaluation Inventory and Adjustment Scales for Sociometric Evaluation of Secondary School Students. Teaching ratings were also collected using the Devereaux Elementary School Behaviour Rating Scale.

In the first stage, 374 children were tested in the lab, including 147 with a schizophrenic parent, 93 with a depressed parent, and 134 normal controls. Outside the lab, 687 children were assessed in the schools, including 154 with a schizophrenic parent, 91 with a depressed parent, and 442 normal controls. Assessment of the children included an evaluation of their cognitive, social, and personal competence. One hundred ninety-seven families participated in the second stage of the project, which was a longitudinal study. These included 72 with a schizophrenic parent, 53 with an affectively ill parent, and 52 normal controls.

The researchers investigated two parent variables-diagnosis (i.e., schizophrenic, depressed, normal) and sex (mother, father). Although the primary focus of the study was on schizophrenia, the inclusion of depressed parents allowed them to control the effects of being reared by a

parent with a psychiatric disorder, while varying specific schizophrenic parent rearing patterns and hereditary patterns.

The findings of the study supported the view that high-risk children are vulnerable to the development of mental illness and that they show patterns of social and of cognitive incompetence. Children with a schizophrenic parent differed from children with normal parents on almost every variable, including aggressiveness, withdrawal, relatedness to teacher, distractibility, conceptual skills, and cognitive factors. Children with a depressed parent, however, showed similar patterns of incompetence, even on supposedly schizophrenia-specific variables, suggesting either that many of the parents included in the schizophrenic group also had some affective disturbance, or that many supposedly schizophrenic characteristics are also found in adult depressed patients. Another possibility cited by the researchers is that children with a depressed parent are also at risk to develop later psychopathology.

It seems more than likely, however, that the home environments were actually more similar than the researchers assumed, in that families which include either a schizophrenic or depressed parent are more likely to be preoccupied with these conditions, at the expense of providing necessary structure and support for the children. The children may in fact have been suffering from the effects of being reared in a household in which the illness of the parent was a stressor for all family members.

Dunner (1987) criticizes high-risk studies which have focused on the parent who has a mental illness but have neglected to assess the other parent with regard to the development of illness in the child. He also emphasizes the need to find biological markers for the various disorders,

so that researchers can be sure that they are dealing with separable disorders. As yet, he points out, a reliable marker has not been developed for any psychiatric disorder. Dunner suggests that all psychiatric symptoms in children and adolescents may be age-related, that, in fact, a depressive syndrome may be all that we can expect to find.

In contrast to the Stony Brook High Risk Project, Manfred Bleuler (1984) found that nearly 75 percent of the 184 children of 208 schizophrenic subjects whom he followed in a long term study had a positive outcome. Although he does not specify how he defined success, Bleuler states that 84 percent of the married offspring of his schizophrenic subjects had successful marriages, and that the great majority achieved a higher social status than that corresponding to their parents' status or to their own schooling. Bleuler makes it clear that the basis of his disagreement with other researchers is a matter of judgment. He criticizes other researchers for their focus on morbid traits, and for their refusal to relate their observations to the life situation of the person. For example, he states, other researchers presented the characterization "isolated and withdrawn" as evidence of schizoid psychopathology, while he found that such reactions were normal under highly stressful life circumstances, and that the later mental health of the children confirmed their normalcy. Bleuler does acknowledge, however, that although morbid personality development was less frequent in his study than in earlier ones, he found it to be more common in his subjects than in the general population. He further reports that the majority of the normal children he followed believed that the schizophrenic disorders of their parents seriously affected their ability

to enjoy life and continued to have an effect throughout life in the form of painful memories. He also found that the schizophrenic subjects themselves had been reared in difficult circumstances more often than is typical in the general population.

In his study of high risk children in the 1950s, Garmezy came across a group of children whose prognosis could be viewed as unfavorable on the basis of familial or ecological factors, but who upset predictability by demonstrating good peer relations, academic achievement, commitment to education, and purposive life goals. Garmezy (1987) criticizes psychiatry for its emphasis on pathology, and supports the disciplines of psychology, social work, and pediatrics, which requires basic attention to the normative. Garmezy identifies three categories of variables which relate to protective factors--the personality disposition of the child; the presence of an external support system that encourages and reinforces a child's coping efforts; and the presence of a wholesome family ecology.

(v) Stress and a normative adolescent population

Palmer (1981) speculates that psychiatric disturbance experienced by adolescents is often the result of the experiencing of stressful events coupled with unresolved crises occurring within a crucial developmental period. In order to clarify which specific events are perceived as most stressful by normal adolescents, and to determine possible differences between females and males in their perceptions of the stressfulness of an event, she interviewed 91 adolescents between the ages of 12 and 18 years who were students in a certain school district. Data was obtained through a self-report questionnaire developed by the investigator. The

questionnaire was designed to provide pertinent demographic characteristics of the sample, to identify events most stressful to the adolescents, and to encourage additional input by the participants. A matrix question arrangement was used, and responses were placed on a one-to-five point scale, with one indicating mild stress, and five indicating severe stress. Events were divided into three categories, personal, familial, and social on the premise that one interacts with the environment first, within the family second, and third, on a social level. Each category was randomly placed on the questionnaire format, and events within each category were also randomly placed.

When the questionnaire was administered, emphasis was placed on the importance of the adolescent's perception of the event in question, regardless of whether the adolescent had actually experienced the event. Analysis of data was accomplished by computations of frequency distributions for each event, which were then viewed according to the sample and each sex. Analysis of variance was computed for each event to determine any significant differences occurring in life-stress perceptions between female and male participants.

Each event within a particular category (personal, familial, social) was analyzed according to frequency distribution, and assigned point value to establish the most and least stressful events for each category. The t-test was used to determine any statistical difference in the perceptions of males and females within each category. The frequency distribution of the total sample, in which the number of female participants was two and one half times larger than that of males determined "personally placed in an institution" to be the most stressful event. The most stressful event

within the familial category was "death of a parent", and "death of a friend" was classified as the most stressful event within the social category. When the investigator computed the assigned point values given to each category by the sample and each sex, she found that all participants agreed that the familial category contained the most stressful events, and the personal category the least stressful. Events which the adolescents themselves found stressful and which were not part of the inventory included "feeling inferior", "feeling different", "trying to stay organized", and "going to a doctor". The findings of this study support the emphasis of the current study on ascertaining the subjects' perception of events which have influenced them. These findings also provide an understanding of the impact that hospitalization and institutionalization might have on a population which is already vulnerable, and encourage a focus in the research project on evaluating the relationship between psychiatric intervention and outcome.

(vi) An overview of child and adolescent outcome studies

Pfeiffer (1989) explores this theme further in his review of the methodology used in 32 studies which assessed short and longer term outcome of children and adolescents treated in psychiatric facilities. The studies evaluated were located through an exhaustive computerized bibliographic search of both the Medical Literature Analysis and Retrieval System (MEDLARS) and the Psychological Information Data Base (PSYCINFO). The computer search was supplemented by cross-checking the references of all papers published since 1975.

The 32 identified studies included seven child investigations (age range 3 to 12 years), 16 adolescent investigations (12 to 21 years), and nine combined child/adolescent studies, (incorporating ages ranging from 3 to 21 years). Twenty-seven of the studies were conducted post discharge, while the remaining five were done at the time of discharge.

Pfeiffer delineates the limitations which are inherent in follow-up studies. He found that 28 of the 32 studies provided no information on prior treatment, such as special education interventions, or family and community services. Although the majority of studies provided psychiatric diagnoses for their samples, nearly two-thirds of the investigations neglected to describe what specific criteria were employed in reaching a diagnosis. None of the studies explored the relationship between factors within the treatment milieu, such as unit atmosphere, direct-care attitudes, treatment philosophy, organizational structure, parent-staff relationships, integration of unit programs, and dynamics of the interpersonal environment and outcome. Even if positive results are reported, Pfeiffer concluded, there is little assurance that psychiatric hospitalization is the causal factor.

With regard to design, very few of the studies employed any type of comparison group. Only six of the 32 investigations employed researchers who were blind to the study. Forty-three point eight percent of the studies were conducted through face-to-face interviews, 40.6 percent by telephone, and 25 percent through the mail. The respondent rate was reported for 30 of the studies at 63.3 percent with greater than 75 percent compliance and 26.7 with rates between 51 and 75 percent. Discharge to time of follow-up was variable and poorly demarcated in all

but four of the studies, with 87.5 percent describing time spans ranging from six months to six years. The majority of adolescent studies relied on a self-rating component as a source of data, while parents were generally used as sources of information for child patients.

The most popular means of collecting follow-up data was non-published questionnaires, typically developed by the author of the study. Only one study employed a published standardized questionnaire and only 25 percent used standardized rating scales. The most frequently reported statistical procedure was t-tests (28.1 percent) followed by chi-square analysis and correlation analysis (18.8 percent for both). Thirteen studies did not incorporate statistical measures of the data, and only one reported multiple regression.

Pfeiffer describes his systematic analysis of previous investigations as his attempt to provide insight into how to conceive and design future studies. As a result, he offers a number of both theoretical/conceptual considerations and methodological/design considerations which he believes to be important. He supports the view that outcome should be defined as multidimensional and multidirectional, allowing for both positive and negative outcomes in a variety of dimensions. Simply looking at improvement in symptoms offers too restrictive a view, he maintains, since symptoms may wax and wane. He thus suggests that enhanced coping capacity may be a more productive avenue for researchers to explore.

Pfeiffer also recommends that the hospital setting itself be regarded from a social-developmental context as an ecological environment. He extends his biopsychosocial framework by emphasizing the need for follow-up research to explore the many stresses and supports in the

environment to which the youngster returns after inpatient treatment. Very few of the 32 studies evaluated the discharged patient's adjustment in the community by using indicators of role performance and social adjustment, he states.

A final conceptual consideration, according to Pfeiffer, is an expansion of the array of predictor and outcome variables. He presents a number of interesting predictor variables which have to date been infrequently investigated. These include: the father's presence and involvement with the family; academic status and/or learning problems; locus of control issues; the needs for achievement and affiliation; perceived alienation from others; attitudes toward authority; children's attitudes toward hospitalization and treatment; availability of after-care resources; interpersonal competence.

Pfeiffer also suggests a number of important methodolgical considerations. He recommends that regardless of research design, investigators ensure that measures are taken at preplacement, during treatment, at time of discharge, and during follow-up. Experimental blindness and the use of a comparison group not receiving inpatient treatment are additional goals that evaluators need to strive for, he maintains. The use of validated scales and instruments, a specified follow-up period, and the employment of powerful statistical techniques, such as multiple regression, are also important design considerations in Pfeiffer's view.

Pfeiffer acknowledges that the researcher delving into this field faces a number of barriers, including the cost involved, the cooperation of discharged patients and their families, and the availability of staff

who can track, interview, and coordinate compilation and analysis of follow-up data. He emphasizes, however, that attention to both theoretical and methodological considerations is important for researchers who are seeking to develop better programs through their exploration of the dynamic interaction of patient qualities; treatment program characteristics; situational, community and family variables; and after-care services.

(vii) Labeling theory

As Palmer and Pfeiffer establish, the individual's perception of the events leading to hospitalization, and to his or her subsequent hospitalization and treatment is clearly significant to outcome. Erving Goffman (1959) has suggested that the impact of hospitalization for psychiatric reasons is powerful enough to alter the social fate of an individual who is prone to follow a career as a mental patient because he is perceived by others in that role, and eventually comes to perceive himself or herself in the same light. Labeling theorists have described how the stereotyped imagery of mental disorders which is learned in early childhood is continually reaffirmed in ordinary social interaction, and is then applied to individuals who enter the psychiatric system. Scheff (1981) points out that people who are labeled may actually be rewarded for playing the stereotyped role and punished when they attempt to return to conventional roles. Someone who has been treated in a psychiatric system usually finds himself discriminated against in seeking to return to his old status, and on trying to find a new one in the occupational, marital, social, and other spheres, he maintains.

In order to assess the efficacy of labeling theory, Warner, Taylor, Powers, and Hyman (1989) evaluated the effects on functioning of the acceptance of a label of mental illness by a group of psychotic patients. These researchers randomly selected 54 psychotic patients from the caseload of a comprehensive community mental health centre. Subjects were required to be 18 years of age or older, and to have a diagnosis of schizophrenia, bipolar disorder, or schizoaffective disorder. Patients who were acutely psychotic or noncompliant with the use of medication were excluded from the sample. The study sample was reduced to 42 subjects after nine refused to participate and three dropped out. The diagnosis of mental illness was long-standing for all of the subjects, and all but one had been in treatment for at least five years.

Each subject was asked to complete four self-report instruments. These instruments included the Self-Labeling Schedule which was developed for this study to determine whether the subject considered himself or herself to have a major mental illness. Subjects ascribing to themselves the terms "schizophrenia", "manic depressive illness", or "mentally ill" were considered to accept the diagnosis of major mental illness, regardless of what other terms they applied to themselves. Those who failed to ascribe one of these three terms to themselves were considered to have rejected the label.

Other measures used included Rosenberg's ten item Self-Esteem Scale, the Reid-Ware Three Factor Internal-External (locus of control) Scale, and a semantic differential instrument previously developed by Olmstead and Durham, which was used to assess the degree of stigma attached by the subjects to a mentally ill person.

Hypothesizing that level of functioning relative to degree of pathology would be a more suitable outcome measure than either functioning or pathology alone, the researchers chose to measure functioning and pathology with the Colorado Client Assessment record and to use the residuals from the regression of functioning on pathology scores as the dependent variable in their analysis. Data on gender, age, diagnosis, and age of onset of psychotic symptoms were gathered for each subject.

When the data were analyzed, it was found that those who accepted the label of mental illness were similar to those who rejected the label, except that the label acceptors exhibited lower self-esteem and a more external locus of control. Subject dysfunction and psychopathology were highly correlated, and subject age was correlated with relative functioning, while subject gender, diagnosis, and age of onset were not. Diagnosis was unrelated to subject self-esteem, locus of control, or acceptance of the label of mental illness. As predicted by labeling theory, among subjects who accepted the label of mental illness, those who attached high levels of stigma to mental illness demonstrated lower self-esteem, while those who rejected the label revealed higher levels of self-esteem which were not affected by the stigma they perceived in mental illness. Label acceptors and subjects who assigned greater stigma to mental illness both had a more external locus of control. In the regression of acceptance and stigma on locus of control, acceptance contributed a significant proportion of the variance but stigma did not. Since the expected interaction between label acceptance and stigma was not present, one component of the labeling theory model was not supported. This research also did not find a significant correlation between either

acceptance or stigma and relative functioning, a further finding that was inconsistent with labeling theory. When acceptance of label and locus of control were examined in relation to relative functioning, however, with locus of control taken into account, subjects demonstrated better relative functioning when they accepted the label of mental illness.

This study thus failed to substantiate the central hypothesis of labeling theory--that acceptance of a label of mental illness is associated with poor functioning in psychosis. Some elements of labeling theory were supported, however, although it was unclear to the researchers whether labeling contributes to poorer outcome, or whether those who lose their sense of self-control choose to adopt a label of mental disorder to avoid responsibility for their actions. The study also supported some of the assumptions of the psychotherapeutic model, which assumes that insight into the illness, and sense of mastery over it promotes better functioning.

(viii) Relation of previous studies to the present one

Although the long-term studies conducted with adults and the "expressed emotion" studies included populations who were significantly older than the subjects interviewed for the current study, many facets of this research are relevant to the present investigation. The conclusion by Harding et al. (1987) and by Manderscheid (1987) that diagnosis has limited predictive value, and that outcome is likely to be a complex and heterogeneous picture points the way to similar findings in the present study. The appreciation of outcome as a measure of functioning in relation to ongoing treatment experience, employment, social

relationships, ability to meet basic needs, and fullness of life, rather than primarily as a measure of the existence of symptoms is a further important contribution made by these researchers. Health and Welfare Canada's (1985) definition of outcome as a multi-dimensional concept supports the approach of the current study. The study conducted by Wing (1978) supports an evaluation of the effect of the treatment process itself, including any periods of hospitalization, on the outcome of the subjects. Since the subjects were in their early teenage years at the time of their index hospitalization for a psychiatric disorder, it is important to acknowledge the impact that this and subsequent periods of residential treatment might have had on their identity formation and eventual outcome.

Although the current study is not being carried out as an expressed emotion study, the findings of this research that family atmosphere affects the course of dysfunction following hospitalization are important to the present research, which has placed a heavy emphasis on evaluating the role of family functioning and of family members in relation to outcome. Family influence is considered to be particularly important to the completion of adolescent developmental tasks such as separation and individuation and identity formation.

All of the subjects included in the present study fit the criteria of the high risk projects. Family histories taken at the time of assessment revealed that there was a significant amount of previous history of mental illness in several of the families, that many of the parents were themselves depressed, that some of the parents were or had been alcoholic, that some of the families had patterns of physical or sexual abuse, or

that the children had otherwise been traumatized. In light of the problems which many of the families appeared to have when the children were hospitalized, it was not surprising that the adolescents had developed symptoms of psychopathology.

A focus on clinical aspects would no doubt confirm that symptoms of psychopathology are still present in many of the young people, five to seven years after their initial hospitalization. The findings of the high risk studies, which use a diagnostic battery to assess outcome support the fact that this is often the case. The assumption of this research study, in tune with the approaches taken by Garmezy (1987), Bleuler (1984), and the following researchers, is that, regardless of psychopathology, the outcome of the subjects would be determined by how well they were able to adapt to and cope with their changing life circumstances in the intervening course.

Palmer (1981), Pfeiffer (1989), and the labeling theorists support the emphasis of the current study on assessing outcome from the subjects perspective, and point the way to an evaluation of whether or not subjects accepted or rejected a label of mental illness in the long-term. These authors also establish that the impact of hospitalization on the Adolescent Unit, and of subsequent treatment experiences, must be considered in any discussion of outcome.

(ix) Conclusions

In the foregoing literature review, the author of the current study has attempted to establish an understanding of adolescence as a crucial developmental phase during which teenagers are impacted by family

functioning as well as by the traditions and expectations of the larger social order. It goes without saying that a group which has experienced the primary symptoms of a psychiatric disorder which is going through such a developmental phase is particularly vulnerable to environmental factors such as family dysfunction and role expectations. An appreciation of current assumptions and knowledge in the area of mental illness, as well as of the fact that such illnesses still bear a heavy social stigma is relevant to any discussion of outcome for a group which has entered the psychiatric system.

In tune with the belief that outcome would be determined by the ability of subjects to cope with changing life demands, rather than by the degree of psychopathology which they showed during their assessment on the Adolescent Unit, a tentative hypothesis regarding outcome was made prior to data collection and analysis. It was speculated that subjects who were most supported by family members in achieving their goals would have the best outcome; that those who were able to compensate for lack of family support through involvement with treatment resources would have the next best adjustment, and that those who remained in an environment which was not able to provide them with sufficient support would have the poorest outcome.

Chapter 3

RESEARCH DESIGN AND METHODOLOGY

A. Summary of Research Design

In order to select the population for the proposed retrospective study the case records of all the adolescents assessed on the Adolescent Psychiatric Unit at Vancouver General Hospital between 1981 and 1983 were carefully screened. Subjects were considered for the study because they either had had a psychotic break prior to their admission to the Unit, or because, during the course of admission they were queried to be prepsychotic on the basis of some peculiarity in behaviour. The primary or differential diagnoses given to the subjects at discharge reflect or are suggestive of the existence of psychotic symptoms. Table 1 below depicts the diagnoses, by sex, of all the subjects who met the initial criteria for inclusion in the study.

The purpose of this study was to evaluate the outcome at least five years after hospitalization, of a group of teenagers considered to be at high risk to develop a chronic mental illness, or to have ongoing problems with adaptation. It was expected, in light of the heterogeneity of the population, that outcome would vary from person to person. It was anticipated, however, that some subjects would have a better and some a poorer outcome. A secondary purpose was thus to look for factors which might have supported a positive outcome, as well as those which might suggest the opposite.

Table 1. Discharge Diagnoses of the Original Sample

Diagnosis	Male	Female	Total
Schizophreniform disorder, schizophrenic disorder or schizo-affective disorder.	3	9	12
Schizoid or schizotypal personality disorder or traits.	5	3	8
Depressive disorder with psychosis	2	4	6
Conduct disorder with schizotypal traits or psychotic features.	4		4
Atypical psychosis	1	3	4
Mental retardation with psychosis	2	1	3
Pervasive developmental disorder/ differential diagnosis atypical psychosis.	2		2
Cannabis delusional disorder	1		1
Paranoia with obsessive compulsive personality and psychotic features.	1		1
Totals	21	20	41

In tune with a biopsychosocial emphasis, outcome was seen as a complex process (Harding et al., 1987; Rabiner, Wegner, Kane, 1986). For the purposes of this study, outcome was defined according to the subjects' accounts of how they were functioning in relation to their families, of how adjusted they were to life in the community, and of how satisfied they were with the quality of their lives. Since the outcome measures used as dependent variables all had subscales, outcome was also understood to be a

reflection of how the subjects were doing in each of the areas which were assessed through the use of the scales. For example, the FAM Scale defines family functioning as a measure of task accomplishment, role performance, affective expression, affective involvement, control, values and norms, and communication. The Satisfaction and Happiness Scale has five subscales which include twelve domains. The Progress Evaluation Scale looks at adjustment in seven areas: family interaction, occupation, getting along with others, feelings and moods, use of free time, degree of current problems, and attitudes toward self.

Since the subjects had all been going through a critical developmental phase from the time of discharge from the Adolescent Unit, and since family functioning is held to play an important role in the adolescent's achievement of developmental goals and to prepare him or her for life in the community, the most important outcome measure was held to be the FAM scale. The researcher was also interested in the relation that peers and treatment personnel had to the subjects' outcome and made this a major focus of the research. As previously noted, it was hypothesized that those who were most supported by family members in achieving their goals would have the best outcome, that those whose primary support came from treatment personnel would have the next best adjustment, and that those who received minimal support would have the poorest outcome.

The study was retrospective in design, since subjects were asked to recall a number of events which have taken place since their assessment on the Adolescent Unit. This type of design has advantages, in that data can be gathered quickly and economically. Since people are required to recall

past events, however, some of the data collected may not be reliable, particularly that which is collected on the basis of a judgment made by the subject on what happened. A prospective study would allow the researcher more latitude in observing the presumed effects of the independent variables. Since the study was not experimental, however, it would not be possible, even in a prospective study, to manipulate the independent variables. As Wing (1978) points out, the use of a retrospective design has advantages, as it allows for the evaluation of a large number of factors in relation to outcome, and allows the researcher greater leeway in deciding which ones actually did play a part.

The study was also quantitative-descriptive in design. It was descriptive in the sense that although differences between individuals and associations between variables are noted, causality is not implied. Although an attempt was made to support the findings of the current study by comparing them with previous studies, to the extent that little systematic research has been done on the sample in question, this study is also to a certain extent exploratory.

The study is quantitative in orientation. Although most of the questions asked of respondents were open-ended, answers were coded into relatively discrete variables. It was assumed that they possessed face validity. The use of open-ended questions permitted the study to have a degree of depth which it might otherwise have lacked. It also enabled the collection of a large number of variables which were descriptive of the subject's life in the intervening course since discharge, and which could be measured against the outcome variables in order to determine which variables appeared to be particularly important to outcome.

B. Nature of the Sample

As previously noted the original sample of 41 subjects was composed of all of the young people who were queried to be in the process of developing a long-term psychotic illness at the time of their admission to the Adolescent Unit. This group was prioritized in order to limit some of the variance within the sample, as well as some of the difficulty in locating subjects who live a distance from Vancouver. Since diagnosis in adolescence is often unreliable, it was impossible to avoid the selection of a heterogeneous population who had in common only either a psychotic break or a query of psychosis. It was decided to initially limit the sample to adolescents for whom the admission to the Adolescent Unit was their first psychiatric hospitalization, however, in order to avoid any variance that might be the result of previous hospitalizations. Subjects living at a distance from Vancouver were also excluded, as were two subjects suffering from an organic psychosis, three from mental retardation, and three discharged soon after admission against medical advice. The sample was thus tentatively reduced to exclude five subjects who had had previous hospitalizations, three discharged soon after admission against medical advice, five from out of town, three suffering from retardation, and two from a gradual deterioration for organic reasons. In consultation with unit psychiatric staff, the researcher determined that the subjects excluded because they lived out of town were not significantly different from those who were included.

The reduced sample of 23 consisted of eleven females and twelve males. The researcher was unable to locate five of these subjects, and

four who were found refused to participate. Two of those who refused stated that life was not going well for them at present, and that they were not up to the interview. A third was still angry with his parents for having hospitalized him, and saw his participation as an acceptance of the treatment process.

The following table illustrates a breakdown of the 14 subjects who participated in the research by diagnosis at discharge.

Table 2. Discharge Diagnoses of the Final Sample

Diagnosis	Male	Female	Total
Schizophreniform disorder, schizophrenic disorder, or schizo-affective disorder	1	3	4
Schizoid or schizotypal personality disorder or traits	2	2	4
Depressive disorder with psychosis	1	1	2
Conduct disorder with schizotypal traits or psychotic features	2		2
Pervasive developmental disorder/ differential diagnosis atypical psychosis	2		2
Totals	8	6	14

C. Methodology

(a) The Pretest

An open-ended interview schedule was designed by the researcher and was pretested with a former patient of the Adolescent Unit who meets the criteria for inclusion in the study but was not on the Unit between 1981

and 1983; with a young client of the Broadway Mental Health Team who meets the criteria for the study but has not been assessed on the Adolescent Unit; and with a staff member from the Broadway Mental Health Team. Following the pretest, the interview schedule was revised to make the questions and their wording more relevant to a young population, and to include a greater emphasis on the relationship of support received from others to outcome, since the pretest respondents had indicated that this was an important focus.

(b) The Interview

All of the subjects who consented to participate were personally interviewed by the researcher. Each interview took approximately two hours to complete. Subjects were given a choice of location for the interviews. Two subjects thus met with the researcher on the Adolescent Unit, four were interviewed at their place of residence, one was interviewed at Riverview hospital, and seven were seen over coffee at a local restaurant.

At the outset of each interview the subject was asked to sign a consent form agreeing to participate in the research, and giving the researcher access to medical records at VGH. The researcher also informed each subject of his or her right to receive a summary of the research results following completion of the major study. Each subject received assurance that his/her confidentiality would be maintained, and that records would be marked by number, rather than by name.

The researcher followed the interview schedule when asking all questions. If a subject had difficulty with the question, the researcher

repeated it and gave the subject time to think over the answer. Subjects who gave brief answers were prompted with "is there anything else?", or "is that all?"

Following the administration of the interview schedule, which took approximately one and one-half hours, subjects were asked to complete three structured measures, which were used as measures of outcome, and thus as dependent variables. This process took about half an hour.

The first measure administered was the Family Assessment Measure Self-Rating Scale, which allows each subject to indicate how he or she is currently functioning within his or her family. The second measure was a series of five scales used to assess Satisfaction and Happiness in relation to present situation, comparison with peers, comparison with personal goals, compared to previous best achievement, and globally. The third measure, known as the Progress Evaluation Scale, is a self-rating scale which allows the subject to indicate his or her level of community adjustment. In Section (c) below the areas about which questions were asked, and the outcome measures are further defined.

(c) The Interview Schedule and Outcome Measures

Below is a description of the categories included in the schedule and a more in-depth description of the outcome measures.

Questions in each category relate to both events which occurred in the intervening course and to present status in relation to each area. The independent variables used in the study were drawn from the responses to the questions, while the outcome measures served as the dependent variables.

(i) Education

Questions followed subjects from the time of discharge from the Adolescent Unit to the present. The subject was asked whether or not he or she returned to school after discharge; whether he or she is still in school or taking courses; how far he or she has gone with education; reasons for dropping out; what helped him or her most to continue in school; what problems he or she has experienced in this area; and in particular whether there were people who were particularly helpful, or particularly harmful to the process.

(ii) Employment history

Subjects were asked whether they were working at present; what job they held; questions about previous history of employment; what has helped most to get or keep jobs; what kinds of problems they have had in getting or keeping jobs; and in particular whether there were people who helped or hindered them in this area. Subjects were also asked about present and past sources of income, and about any problems they have had in making ends meet.

(iii) Residential history

Subjects were asked where they are now living, and how their residential status has changed since they were in hospital.

(iv) History of ongoing treatment

Subjects were asked about any treatment experience they have had since discharge. Three areas of possible treatment were explored, i.e., treatment in a hospital or residential setting; treatment from a hospital outpatient department or mental health team; and treatment from a private practitioner. The relationship between the subject and treatment personnel was also explored, as was the duration of treatment. Questions pertaining to the subject's use of medication, and to diagnostic information were also asked.

(v) Experience on the Adolescent Unit

Questions in this area were asked as a means of providing information to Adolescent Unit staff on the efficacy of discharge recommendations. This information is not included in the current report.

(vi) Family and peer relations

Questions were asked about who the subject includes in his or her definition of family; about how his or her relationship is with each of these people at present; about what the main family problems have been since the subject was discharged, and in particular whether other family members have experienced difficulties; about how he or she has been affected by family problems; and about helpful and unhelpful things that family members do for him or her.

With regard to peer relations, friends are defined as people that the subject has a close, confidential relation with. Subjects were asked to define the extent of their friendship network, and to indicate how their

friends are either helpful or not helpful. The area of how difficult or easy it is for the subject to make friends with males or females was also explored. Subjects were asked whether their closest relationships are with family members, treatment or social service workers, or with friends their own age.

(vii) Drug and alcohol use

Subjects were asked about the extent of their present and past use of drugs and alcohol.

(viii) Legal problems

Subjects were asked about any problems with the law or with the police they have had.

(ix) Quality of life

Subjects were asked what the biggest worries in their life have been since they left the Adolescent Unit; about how these have changed; about their greatest worries at present; about their past and present sources of enjoyment; about their use of free time; about their current degree of satisfaction with life; and about their goals for the future.

(x) Demographic data

In the final section, subjects were asked about their marital status; about their cultural affiliation; and about their parents' occupations. They were also asked whether they have been adopted, are foster children, or are natural children in their present families.

At the conclusion of each interview the researcher noted how the subject presented in the interview.

(xi) Outcome Measures--Dependent Variables

--The Family Assessment Measure: Self-Rating Scale

The Family Assessment Measure was developed to provide quantitative indices of family strengths and weaknesses. It consists of three components, a General Scale, which focuses on the family as a system; a Dyadic Relationships Scale, which measures relationships between specific pairs in the family; and a Self-Rating Scale, which taps the individual's perception of his or her functioning in the family. Each scale provides a different perspective on the family functioning (Skinner, 1987). FAM is designed to be conveniently used in clinical and research settings as a diagnostic tool, as a measure of therapy process and outcome, and as an instrument for basic research on family processes (Skinner, Steinhauer, Santa-Barbara, 1983).

Theoretically, the Family Assessment Measure is based on a process model of family functioning that integrates different approaches to family therapy and research. The goal of the family is assumed to be the successful achievement of a variety of basic, developmental and crisis tasks (Task Accomplishment). Successful task accomplishment involves the differentiation and performance of various roles (Role Performance); communication of essential information (Communication), including the expression of affect (Affective Expression); the degree and quality of family members' interest in one another (Involvement); and the process by which family members influence and manage each other (Control). From a

more general perspective, how tasks are defined, and how the family proceeds to accomplish them may be greatly influenced by the specific culture and family background (Values and Norms).

Although the FAM model identifies dimensions that are relevant to family health or pathology, it also attempts to define the processes by which families operate. It thus emphasizes how basic dimensions of family functioning interrelate and encourages formulation at both the total-family-system and the individual-intrapsychic levels (Skinner, 1987).

The current version of FAM being used is the FAM III. The Self-Rating Scale, which includes 42 items, provides an overall index along with seven measures relating to the process model. FAM III was tested with 475 families (933 adults and 502 children). The Self-Rating Scale showed an internal consistency reliability estimate of .89. The median reliability of the six subscales from the Self-Rating Scale was .53.

When FAM scales are scored, a score of 41 to 59 places the family in the healthy range, 60 or above in the unhealthy range, and 40 or below in the range of family strength.

It takes approximately one hour to administer all three FAM scales. Since the researcher wanted to keep the length of time of each interview to approximately two hours so that the subjects would not lose interest, a decision was made to use only the Self-Rating Scale, which was evaluated to be the best measure of outcome of the three scales, since its focus is on the relationship of the individual with his or her family. A sample item from this scale is "I'm not as responsible as I should be in the

family". The subject is asked to strongly agree, agree, disagree, or strongly disagree.

--The Satisfaction and Happiness Scale

This scale was constructed by Michelos (1980), who hypothesized that satisfaction and happiness might be functions of the gap between one's aspirations and one's achievement; functions of the perceived difference between one's own status and that of a reference person or group; or functions of the difference between present accomplishments and past accomplishments. To test this hypothesis, Michelos distributed a questionnaire to 867 members of the University of Guelph's Staff Association. Of the 357 people who responded (41 percent), 70 percent were female, and 30 percent male. Sixty-six percent were married and 34 percent single. The questionnaire had 64 items in five pages and took about 20 minutes to complete. Four pages, which included 13 items covering 12 domains and life as a whole, covered perceived satisfaction, the goal-achievement gap, life compared to average folks the same age, and life compared to the best previous experience. All of the 53 substantive items called for a single checkmark on a seven point rating scale, with one off scale option called "no opinion".

The 12 domains included on each of the scales are health; financial security; family life; friendships; housing; job; free time activity; education; self-esteem; area the subject lives in; ability to get around; and security from crime. Using partial correlation techniques, Michelos found substantial levels of covariance among the variables used in predictions of satisfaction and happiness with life as a whole from

satisfaction with specific domains. Using path analysis, he found confirmation in the twelve domains of a model which has satisfaction as a function of a perceived goal-achievement gap, and the latter as a function of comparisons with previous best experience and the status of most people. Through the use of discriminant analysis, Michelos also found satisfaction with family life to be a powerful and predominant discrimintor among three groups, which he identified as frustrated, resigned, and achievers.

In the present study Michelos' four scales were administered to all subjects. Each of the scales also included questions which are global indicators of satisfaction and happiness since they pertain to life as a whole. In effect then, there are actually five scales, one which measures satisfaction and happiness in relation to the subject's life these days; one which assesses how life now matches the subject's own goals; one which asks the subject to compare his or her life to that of the average; one which asks him or her to compare life to his or her own previous best; and one which includes the global indicators. Each subscale is scored by adding the numbers circled in the 12 domains, and then by dividing by 12. The total score is the average of the subscale scores.

--The Progress Evaluation Scales

The Progress Evaluation Scales, developed by Ihilevich, Gleser, Gritter, Kroman, and Watson (1981) are a measuring device for evaluating current functioning, and assessing change over time in clinically relevant aspects of personal, social and community adjustment. They are made up of seven scales, each consisting of five levels, with the characteristics of

each level described. The five points in each scale have been assigned a value of 1 to 5 for statistical purposes, assessing the most pathological to the healthiest levels of functioning observed in the community. All seven scales are printed on a single page for ease of administration.

The seven dimensions of the PES were chosen to represent the major areas in which health and psychopathology reveal themselves. They reflect the notion of a single continuum for health and psychopathology, e.g., the scale which pertains to family interaction ranges from "often must have help with basic needs" to "usually plans and acts so that own needs as well as needs of others are considered". The scales are: family interaction; occupation (school-job-homemaking); getting along with others; feelings and moods; use of free time; degree of current problems; and attitudes toward self.

The PES have been widely tested among therapists. Ihilevich et al. (1981) report that reliability estimates for current status ranged from .49 for Problems to a high of .86 for Getting Along With Others. As well, correlations between patient and therapist ratings were all shown to be highly significant ($p < .01$).

The Progress Evaluation Scales were administered to each subject in the current study in less than five minutes.

(d) Ethical Issues

In accordance with UBC ethical guidelines, each subject was initially contacted by letter, and then subsequently by telephone. All subjects were asked to sign consent forms, and were notified of their right to withdraw from the project at any time. They were further notified that

refusal to participate would not in any way jeopardize their right to involvement at Vancouver General Hospital. Written data has been identified by number rather than by name, and the researcher alone is able to match the numbers with the names. Since the sample size is small, particular care in protecting the identity of the subjects is indicated.

(e) Strategy of Data Analysis

The data analysis proceeded through several distinguishable stages. In the first stage, a qualitative content analysis of the results of the first seven interviews was conducted. Variables which appeared to be associated with outcome were included if they were common to two or more subjects. One hundred and thirteen independent variables were thus derived from the responses of the first seven respondents.

The variables were then matched with the information given by the subjects, to determine the frequency with which they were endorsed. Data was analyzed through the use of SPSSX:3. T-tests were performed for all variables, allowing those who had the variable (indicated by a one) to be compared with those who did not have the variable (indicated by a zero), in relation to the outcome measures. The purpose was to see if certain aspects of the study population were significantly associated with a certain kind of outcome (either positive or negative). Significance was assessed at $p < .05$, but because the sample size was small, note was made where $p < .10$. The results were intended to point the way to further testing with a larger sample, as it was clear that the sample was too small to allow any findings to be generalized.

For example, the three subjects in the sample of seven who had accepted a long-term psychiatric diagnosis and who fit the criteria for chronic mental illness (ongoing need for treatment) had a low mean score for values and norms on the FAM scale (44 compared to 57.5, $p < .060$), indicating an association between the family's values and cultural values. They also had significantly lower scores on the Satisfaction and Happiness Scales, and lower scores for occupation, getting along with others, and degree of present problems on the Progress Evaluation Scale subcales. On the basis of these findings, it was decided that the larger study would look closely at outcome in relation to diagnostic status, i.e., whether subjects had not accepted a diagnostic label and were functioning well; whether they were aware of and appeared to have accepted a diagnostic label, reflected in their ongoing involvement with treatment resources on the basis of the label; or whether they continued to have ongoing social and emotional difficulties and occasional contact with treatment resources but had not accepted a label.

The second phase of analysis took place following the completion of subsequent interviews. Ten variables which were drawn from information taken from hospital charts, and 31 derived from the subjects' description of events which occurred between their discharge from the Adolescent Unit and outcome were selected for cross-tabulation with the outcome measures. The latter 31 variables had been confirmed to have some association with the outcome measures in the first phase of analysis.

Even though the results of chi-square analysis are not meaningful with such a small sample, the chi-square statistic was used to establish associations between the independent and dependent variables which could

be pursued in a larger study. Since this study is both descriptive and to some degree exploratory, and since the sample size was small, some latitude was allowed in assessing significance. Significance was thus assessed at $p < .10$, and a possible trend noted when $p < .20$. Probability values are not cited in the findings, however, since they are not meaningful.

The following chart depicts a breakdown of the 41 independent variables which were cross-tabulated with the outcome measures.

Table 3. Breakdown of Independent Variables

Area of Focus	Variable No.	Variable Categories
Family Relations	1	1. Relations have been gradually improving with the family since discharge from the Adolescent Unit 2. Relationship is about the same as it has always been 3. Relationship with the family has deteriorated.
Family Relations	2	1. The family has had major problems 2. The family has had moderate problems 3. The family has had minimal problems.
Family Relations	3	1. Subject is the main person in the family who has had problems 2. Another sibling has had major difficulties 3. One or both parents has had major difficulties 4. Every family member has had problems
Family Relations	4	1. Sibling relations are good at outcome 2. Sibling relations are fair 3. Sibling relations are poor 4. Subject is the only child.
Family Relations	5	1. Relations with mother are good 2. Relations with mother are fair 3. Relations with mother are poor.

Table 3. Breakdown of Independent Variables (Continued)

Area of Focus	Variable No.	Variable Categories
Family Relations	6	1. Relations with father are good 2. Relations with father are fair 3. Relations with father are poor.
Family Relations	7	1. Is an adopted child in his or her family at outcome 2. Is a natural child 3. Is a foster child.
Family Relations	8	1. Has continued to live at home 2. Has left home but has had an inconsistent pattern, moving from place to place 3. Has lived in a treatment setting for most of the time since discharge 4. Has lived independently in a stable setting for at least 2 years.
Treatment Issues	9	1. Has had no further treatment since discharge from the Adolescent Unit 2. Has had minimal treatment (infrequent and short-term contacts with private practitioners or Mental Health Teams) 3. Has had moderate treatment (including residential treatment at the Maples with no follow-up or ongoing treatment in the community with periods of disruption) 4. Has had extensive, ongoing treatment.
Treatment Issues	10	1. Most treatment has been with a private practitioner 2. Most treatment has been at an Out-patient Department or Mental Health Team 3. Most treatment was at the Maples or other residential setting 4. Has been in hospital long term 5. No further treatment.
Treatment Issues	11	1. Has been on medication for most of the time since discharge from the Adolescent Unit 2. Has used medication intermittently 3. Has not been on medication since discharge.

Table 3. Breakdown of Independent Variables (Continued)

Area of Focus	Variable No.	Variable Categories
Treatment Issues	12	1. Is closest to treatment people 2. Is closest to family members 3. Is closest to peers.
Treatment Issues	13.	1. Is aware of and accepts diagnosis for a psychiatric illness 2. Is not sure re current diagnostic status--continues to have problems but has rejected a label for a psychiatric illness 3. Is relatively adjusted and has not accepted a diagnostic label.
Peer Relations	14	1. Has 3 or more close friends 2. Has 1 or 2 close friends 3. Has no close friends.
Peer Relations	15	1. Has a lot of trouble making friends 2. Makes friends with moderate difficulty 3. Makes friends easily.
Peer Relations	16	1. In general gets along better with people since discharge 2. Gets along about the same 3. Relations with others have deteriorated.
Peer Relations	17	1. Has 1 to 5 people in his or her social network 2. Has more than 5.
Peer Relations	18	1. Has tried a number of drugs and uses some one or more times a week 2. Has experimented, uses drugs occasionally 3. Does not use drugs.
Peer Relations	19	1. Uses alcohol one or more times a week 2. Drinks occasionally 3. Does not drink.
Attainment of Educational Goals	20	Years of education.

Table 3. Breakdown of Independent Variables (Continued)

Area of Focus	Variable No.	Variable Categories
Education	21	1. Lacked motivation to continue with education after discharge from the Adolescent Unit, illness a factor 2. Self-motivation prime factor in continuing 3. External encouragement from family, peers, or teachers prime factor to continue.
Education	22	1. Parents encouraged education 2. Parents criticized educational goals 3. Parents did not play a major role.
Education	23	1. Peers supported educational goals 2. Peers had a negative influence 3. Peers did not play a major role.
Education	24	1. Teachers supported educational goals 2. Teachers encouraged subject to drop out of the regular system 3. Teachers did not play a major role.
Education	25	1. Attended alternate school only following discharge from the Adolescent Unit 2. Remained in the regular school system 3. Attended alternate and regular schools 4. Dropped out of school at the time of discharge.
Attainment in the Area of Employment	26	1. Has worked at a job for a year or more, or has been attending school full time and has frequently worked in the summer 2. Has worked at several jobs for a short time but has had trouble keeping jobs 3. Has worked minimally or not at all.

Table 3. Breakdown of Independent Variables (Continued)

Area of Focus	Variable No.	Variable Categories
Employment	27	1. Self-motivation has been the main factor in securing and keeping employment 2. Family support has been the main factor in securing and keeping employment 3. Peer support has been the main factor in securing and keeping employment 4. Has major difficulties in this area.
Employment	28	1. Has supported self with earnings from his or her job and subsidies from the family 2. Has supported self primarily on social assistance 3. Has supported self on earnings from employment and social assistance.
Difficulties with the Law	29	1. Has had moderate difficulties with the Law 2. Has had minor difficulties 3. Has had no legal difficulties.
Quality of Life Issues	30	1. Has concrete goals for the future 2. Has general goals for the future 3. Has no future goals; will take what comes.
Quality of Life	31	1. Is very satisfied with life right now 2. Is somewhat satisfied with life 3. Is somewhat dissatisfied 4. Is very dissatisfied.
Hospital Records-Family History	32	1. At least one parent has a history of alcoholism 2. Alcoholism reported in the extended family 3. No alcoholism reported.

Table 3. Breakdown of Independent Variables (Continued)

Area of Focus	Variable No.	Variable Categories
Hospital Records-Family History	33	1. At least one parent has a history of mental illness 2. Mental illness reported in the extended family 3. Sibling has a mental illness 4. No mental illness reported.
Hospital Records-Family History	34	1. One parent has had serious medical problems 2. Sibling has had serious medical problems 3. No serious medical problem reported in the immediate family.
Hospital Records-Family History	35	1. Mother or father trained as a nurse or social worker 2. Neither parent trained as a nurse or social worker.
Hospital Records-Family History	36	1. Family assessed by Unit staff to be clearly dysfunctional 2. Family assessed to be not highly dysfunctional but having problems 3. Family not assessed to be dysfunctional.
Hospital Records-Family History	37	1. At least one parent suffers from depression 2. Depression in the extended family 3. No depression reported.
Hospital Records-Presenting Problems	38	1. Subject was clearly psychotic on admission to the Adolescent Unit 2. Subject was queried to be in the process of developing a psychosis.

Table 3. Breakdown of Independent Variables (Continued)

Area of Focus	Variable No.	Variable Categories
Hospital Records-Presenting Problems	39	1. Subject had a history of aggression and conduct disturbance 2. Subject had a history of social withdrawal and depression 3. Subject was psychotic.
Hospital Records-Prime Diagnosis at Discharge	40	1. Main diagnosis was for a psychotic illness 2. Main diagnosis was for a personality, developmental, or behaviour disorder 3. Main diagnosis was for depression.
Hospital Records-Status with MSSH	41	1. Subject had been in foster care for a period of time 2. Subject had not been in foster care.

(f) The Dependent Variables and their Relationships with the Independent Variables

A number of bivariate associations were examined in this study. As a result, the outcome measures were treated as "dependent" variables. The definition of these variables as "dependent" is suspect since no independent variable is being manipulated, and the possibly contaminating effects of extraneous third variables cannot be controlled for. In some cases the effect of a third variable is unknown because the particular variable was not accounted for in the data collection. For example, the frequency of contacts that the subjects had with social agencies prior to their hospitalization on the Adolescent Unit was not accounted for in this study. Although subjects who had had prior hospitalizations for

psychiatric reasons were excluded, since hospitalizations have been found to predict a chronic course, it was not clear whether or not contact with social agencies was associated with outcome, and this was not included as a focus.

It is also difficult to classify the variables used in this study as purely "independent" or "dependent." The "independent" variables are defined as such primarily because they preceded and appeared to have a probable association with the "dependent" variables. This relationship exists, however, because the design of the study is retrospectrive. A prospective design using the same outcome measures would have helped to establish whether or not any of the relationships which were found at outcome actually existed at the time of hospitalization. It is likely that several of them did, and that, in fact, family strengths and weaknesses are predictor rather than dependent variables. It is also likely that several of the "independent" variables exist concurrently with the "dependent" variables. For example, do family values and norms precede involvement with treatment resources, are they determined by involvement with treatment resources, or do they exist concurrently with such involvement? Although a number of associations were examined in this study, the outcome measures were arbitrarily defined as "dependent" variables, since they could conceivably affect or exist concurrently with the "independent" variables.

(g) Dependent Variables

The following tables and discussion more fully describe the dependent variables.

Table 4. Definition of Endpoints of FAM Subscales
(Scores above 40 and below 60 are indicative of average functioning)

1. Task Accomplishment

Low scores (40 + below) STRENGTH	High scores (60 + above) WEAKNESS
- basic tasks consistently met	- failure of some basic tasks
- flexibility and adaptability to change in developmental tasks	- inability to respond appropriately to changes in the family life cycle
- functional patterns are maintained even under stress	- minor stresses may lead to crisis

2. Role Performance

Low scores (40 + below) STRENGTH	High scores (60 + above) WEAKNESS
- roles are well integrated	- lack of agreement regarding role definition
- members adapt to new roles required in the development of the family	- inability to adapt to new roles
- no idiosyncratic roles	- idiosyncratic roles

3. Communication

Low scores (40 + below) STRENGTH	High scores (60 + above) WEAKNESS
- messages are direct and clear	- communications are insufficient, displaced or masked
- information is sufficient	- lack of mutual understanding
- receiver is open to messages sent	- inability to seek clarification in case of confusion
- mutual understanding among family members	

4. Affective Expression

Low scores (40 + below) STRENGTH	High scores (60 + above) WEAKNESS
- affective communication characterized by expression of a full range of affect, when appropriate and with correct intensity	- insufficient expression
	- inhibition of emotions or overly intense expression of emotion

5. Affective Involvement

Low scores (40 + below) STRENGTH	High scores (60 + above) WEAKNESS
- quality of involvement is nurturant and supportive	- involvement may be narcissistic or symbiotic
	- family members may exhibit lack of autonomy

6. Control

Low scores (40 + below) STRENGTH	High scores (60 + above) WEAKNESS
- able to shift habitual patterns in order to adapt to changing demands	- control attempts are destructive and shaming
- control attempts are constructive, educational and nurturant	- style may be too rigid or laissez-faire

7. Values and Norms

Low scores (40 + below) STRENGTH	High scores (60 + above) WEAKNESS
- family values are consistent with their subgroup and the larger culture to which the family belongs	- components of the family's value systems are dissonant resulting in confusion and tension
- explicit and implicit rules are consistent.	- explicitly stated rules are subverted by implicit rules

Subjects were asked to strongly agree, agree, disagree, or strongly disagree with 42 statements included in the Self-Rating Scale. The raw scores obtained for each of the subscales were then translated into standard scores, according to guidelines included in the administration and interpretation guide. The overall rating was obtained by averaging the seven clinical subscales.

Scores in the FAM profile are normalized so that each subscale has a mean of 50 and a standard deviation of 10. The majority of scores are expected to fall between 40 and 60. Scores outside this range are expected to indicate either very healthy functioning (below 40) or disturbance in family functioning (above 60).

As previously noted, Skinner, Steinhauer, and Santa-Barbara (1983) developed the Family Assessment Measure from a model which understands family functioning as a process of task accomplishment through which the family attains, or fails to achieve, objectives central to its life as a group. Since the focus of the Self-Rating Scale is on the relationship between the individual and his or her family, its use in the present study allowed the subjects to provide profiles of how their families were

functioning at outcome, in relation to the subjects. Other family members may or may not share these perceptions.

According to the FAM model, family functions include allowing for the continued development of all family members, providing reasonable security, ensuring sufficient cohesion to maintain the family as a unit, and functioning effectively as part of society. Task accomplishment is seen as the most basic activity of the family. Successful task accomplishment involves the differentiation and performance of various roles; the ability to communicate information necessary to task accomplishment and role performance; the ability to express affect; the ability of the family to meet the emotional and security needs of its members through affective involvement; the ability to have consistency and responsibility in the area of control; and the ability to have explicit and consistent values and norms.

The Self-Rating Scale was used in the current research as a means of assessing how the subjects evaluated their family functioning at outcome. Variables were cross-tabulated with each of the subscales as well as with the average score to determine which elements of family functioning were particularly important in relation to the independent variables, and to add depth to the findings.

The following table identifies the dimensions and domains assessed by Michelos' Satisfaction and Happiness Scale.

Table 5. Description of the Satisfaction and Happiness Scale

(Subscale Dimensions (How satisfied are you ...)	Domains (in the following areas)
1. With regard to Life These Days	1. Health
	2. Financial Security
	3. Family Life
2. Compared to Your Own Aims or Goals	4. Friendship
	5. Housing
	6. Job
	7. Free Time Activity
3. Compared to Average People Your Age	8. Education
	9. Self-Esteem
	10. Area You Live In
	11. Ability to Get Around
4. Compared to Your All Time High	12. Security from Crime
	13. Globally, or Considering Your Life as a Whole

Subjects were asked to rate their responses on a seven point scale with one indicating their lowest response and seven, their highest. Scores for each subscale and for the global responses were averaged to produce the average Satisfaction and Happiness score. The average score was then used as the dependent variable. The highest average score which could be achieved was seven, indicating that present conditions were far above average. A score of four indicated that subjects were functioning at their average, while a score which was less than four indicated that there was some deterioration in functioning.

As the following table shows, the final outcome measure evaluates community adjustment as a measure of achievement in seven areas of functioning, on a five point scale.

Table 6. Breakdown of Progress Evaluation Scale

Subscale Areas	Dimensions
1. Family Interaction	1. Has significant difficulties at all times
2. Occupation (School, Job or home making)	2. Has difficulty most of the time
3. Getting Along with Others	3. Has some ability, but still has difficulty
4. Feelings and Mood	4. Is generally successfull, but still has occasional difficulty
5. Use of Free Time	5. Is usually successful.
6. Degree of Problems	
7. Attitude Toward Self	

The average score for the Progress Evaluation Scale, which served as the dependent variable, was obtained by adding all of the scores for the subscales together and dividing by seven. The highest score that could be achieved was thus five, indicating success in functioning in all areas.

Chapter 4

RESULTS

A. Sociodemographic Characteristics of the Population

When the interviews were carried out, one subject was 19 years old, two were 20 years of age, four were 21, four 22, two 23, and one 24. The average age for the sample was thus 21.5 years. The average age of the six females in the sample was 21.8 years, while that of the eight males was 21.3 years.

At the time of hospitalization, two subjects were 13, two 14, five 15, four 16, and one 17. The average at that time was 15 years, with the average for the female subjects 15.5 years, and that for the males 14.6 years.

All of the subjects were born in Canada, and nine of the 14 were born in the Lower Mainland. Twelve subjects were natural children in their families, while one was a foster child and one adopted. All subjects and their parents are Caucasian, except for one subject who is of mixed Native and Black ancestry.

All of the families appear to fit the socioeconomic category of middle class. Three of the fathers of the subjects are currently retired, and one deceased. Although some of the parents are in second marriages, the subjects were all raised either in the second families, or in intact families, other than those previously mentioned. Five of the mothers are nurses, and one a counsellor, while two of the fathers are social workers. One of the fathers is an airline pilot, and another a landscape designer,

while others work in construction, for a computer company, in a mill, and as an appliance repairman. One mother is employed with the coast guard, and others as an activity worker, as a salesperson, and as a waitress. Most of the parents work outside the home. The exceptions are the retired fathers, and three mothers who work at home.

B. Overview of Outcome

(i) Diagnostic status at outcome

At the time that the interviews were conducted only four of the 14 subjects clearly fit the profile of chronic mental illness. These four were the only subjects who were aware of and accepted a diagnosis for a psychiatric disorder. All of them were still undergoing treatment. Two stated that they had been diagnosed as schizophrenic and were living in psychiatric boarding homes and attending community mental health teams, while a third, diagnosed with a schizoaffective disorder, had been a patient in Riverview Hospital for four years. The fourth subject remained at home and continued to see a private psychiatrist. He stated that his diagnosis was for clinical depression. This subject was not the only family member who carried a psychiatric diagnosis at outcome, as he indicated that he had a brother who had been diagnosed schizophrenic in the intervening course. The two subjects who said that they had been told that they have schizophrenia were among five who were clearly psychotic at the time of their assessment on the Adolescent Unit, while the latter two were among nine subjects queried to be in the process of developing a psychotic illness.

Three subjects were functioning relatively well at outcome, and no longer had formal contact with treatment personnel. One of these subjects had been discharged against medical advice by his parents shortly before his assessment on the Adolescent Unit was completed. The other two had received ongoing treatment but were functioning relatively independently when they were interviewed, and did not ascribe any kind of diagnostic label to themselves.

The diagnostic status of the remaining seven subjects was unclear at outcome. Although these subjects continued to have significant difficulties in various areas of their lives, they were ambivalent or critical of the need for treatment, and did not accept any kind of diagnostic label for themselves. Several of these subjects occasionally turned to treatment personnel for help, but contacts were short-lived. Those in this group who had had residential treatment at the Maples described this experience in negative terms. Three of these seven subjects were in the process of a psychotic episode when they were admitted to the Adolescent Unit, and four were queried to be developing a psychotic illness at the time of assessment.

For the purpose of this research, subjects are being assessed at outcome in relation to each other, rather than in comparison to a control group which did not have psychiatric treatment. In order to determine better and poorer outcome subjects, subjects were ranked and evaluated according to their average scores on the three scales used. For example, a subject who received the lowest FAM score, indicating family strength, the third highest score for Satisfaction and Happiness, and the sixth highest score on the Community Adjustment Scale would receive a total

score of ten, and then would be ranked with other subjects to see where she placed in terms of overall outcome.

When the breakdown of subjects according to outcome was carried out, it was clear that there were at least three groupings--better outcome subjects, subjects who were marginal, and subjects who had had a poorer adjustment. Some subjects were difficult to place. For example, the responses of the subject who had remained in hospital reflected an adjustment to institutional rather than community life, a factor which differentiated her from her peers. The subject who had the highest score for satisfaction and happiness appeared to be minimizing major difficulties which were reflected in his scores for the other two scales. These two subjects were placed in the marginal group, but might be better placed in the poorer outcome group.

Four subjects were among those who had a better outcome. The subject who scored the highest was the youth whose parents had discharged him prematurely, and who had received no further treatment. He reported good family relations, positive peer relations, and a long term employment history. He was also in the process of completing an educational program which would qualify him for a skilled job in the labour force. The other two subjects who did not currently accept a diagnosis were also among the better outcome subjects. These subjects reported positive involvement with family members, as well as with peers, and were able to support themselves through their work. Of these two, however, one was more unstable in terms of work, living situation and education than the other, placing this subject closer to the marginal group than the others. The fourth better outcome subject was one of those who stated that she had

been diagnosed schizophrenic. She reported a very supportive family who encouraged her to accomplish within her limits. She lived independently from her family, had positive peer relationships, and had worked in a structured setting for a long term.

Subjects in the marginal group were able to enter the labour force sporadically, or to pursue educational goals, but reported higher degrees of discomfort, and more conflict with family members as well as with people in general. Subjects in the poorer outcome group were socially isolated, did not work or have stable friendships, and felt a lack of family support. The marginal and poorer outcome groups included a mixture of subjects who had accepted psychiatric diagnoses or who were not certain of their diagnostic status because they had minimized involvement with treatment resources. It was clear from the findings, however, that diagnosis was not in itself an accurate predictor of outcome.

(ii) An overview of the families at outcome

As is typical of the medical model, the focus of the subjects' assessment on the Adolescent Unit was the exploration of family and individual pathology as a means of developing an accurate diagnosis. Descriptions of the families taken from hospital records reveal that alcoholism of one parent was a concern, past or present, in eight of the families; mental illness of a parent, grandparent, or sibling in eight of the families; depression of a parent or grandparent in eight of the families; and serious medical problems of a parent in four of the families.

Five of the families are characterized as having enmeshed relationships between the mother and the subject; one as "pseudomutual"; four as unable to cope with the subject's behaviour; two as responsible for scapegoating the subject; and two as uninvolved with the subject.

In the assessement information, family strengths are deemphasized, as is the acknowledgement of the family crisis precipitating the admission. At outcome, however, it was clear from the subjects' descriptions of their families both in the interview and in the profiles of family process which emerged through the use of the FAM Scale, that, from the subject's point of view, each of the families functioned well in some areas and had weaknesses in others. It was also apparent that some of the families were healthier and some more dysfunctional when the FAM profiles were contrasted with each other.

As previously outlined, a FAM score of less than 40 indicates that the family has strength in a certain area of functioning, according to the subject's perception. Scores in the 40 to 59.9 range are indicative of average functioning, and scores over 60 of weakness. When the scores obtained for all of the subjects were analyzed, males and females were equally distributed between the families portrayed as being more functional, and those which appeared to be less functional, in the subjects' perception. The average score for females was 57.5, while that for males was 59.0. The average scores of seven of the subjects were under 60, while seven were over 60. Table 7 shows the frequencies and percentages of areas of family weakness endorsed by the subjects, as indicated by a score of 60 or more on the FAM Self-Report Measure subscales.

Table 7. Areas of Family Weakness at Outcome (as indicated by FAM scores of 60 and over)

FAM Subscale N = 14	f	%
Affective Expression	11	78.6
Values and Norms	9	64.3
Communication	8	57.1
Task Accomplishment	8	57.1
Affective Involvement	7	50.0
Control	5	35.7
Role Performance	5	35.7

From the point of view of the subjects, close to 80 percent of the families had difficulty in communicating feelings (affective expression), while approximately 65 percent were internally inconsistent in the area of values and norms, and did not share the values of the larger society.

Of the seven healthier families, four were portrayed as having difficulties with affective expression (three of these marginally), three with communication, two in the areas of values and norms, task accomplishment, affective involvement, and control, and one with role performance.

One subject identified several areas as family strengths, and had an overall score of 39.86, characterizing her family as the strongest of all of the families described. This presentation of her family was also apparent during the interview in which she described her parents as both encouraging her independence and offering her "a lot of support and reassurance" throughout the course of her schizophrenic illness.

The second family which appeared to be functioning well in all areas (total score 50.29) was that of a subject whose bizarre behaviour before and during his hospital stay had resulted in a query of psychosis, and a referral for ongoing residential treatment at the Maples. This subject reported a positive long term treatment experience with a committed psychiatrist which included an emphasis on family work.

A third subject portrayed his family as having marginal weakness in three areas (values and norms, communication, affective expression), but with a mean score of 53.14 placed this family well within the average range of functioning. The subject in this case, who had had no treatment since discharge, described various other family members as having had mild to moderate problems in the interim, but indicated that he himself felt that he was well supported within his family. "Family members say how well I'm doing and how well I'll be doing a few years from now", he reported.

A fourth subject, whose FAM scores showed weakness in the areas of values and norms, involvement, and role performance and average functioning in the remaining four, had an overall score of 56.86, placing this family in the average range. This subject described heavy use of alcohol as being a current problem that he shares with his parents. Despite this, however, all family members are functioning relatively well economically and socially. The subject believed that his maturation has helped to improve his relations with other members. "Before we had a lot of anger toward one another", he stated, "Now, we get along and are more in tune ... As I grew up I began to see family problems more clearly, so I could think about it and learn to be more cooperative".

Three of the four subjects who had accepted long-term diagnoses had similar overall scores on the FAM Scale. At 57.86, 58.85, and 59.14, these scores were all in the high average range, indicating the tendency toward weakness in several important areas of functioning. The subscale scores of two of these subjects was markedly alike, with dysfunction apparent in areas of control, affective expression, and task accomplishment in both of the families, and in communication in one of the families. For both subjects, family values and norms, affective involvement, and role performance were in the average functional range. One of these subjects had a long term diagnosis of clinical depression and the other of schizophrenia.

The third subject in this cluster, who has had a long term hospitalization, indicated that affective involvement, affective expression, and communication were weak in her family. Social values and norms were particularly strong, and members were able to function within the average range in the areas of control, role performance, and task accomplishment. It is unclear to this researcher however, how long term hospitalization could be entirely compatible with success in role performance or task accomplishment. Although acceptance of the need for treatment may be consistent with a family's ability to accomplish developmental tasks, the fact that this family accepted long term institutionalization suggests that the family was isolated from the treatment process.

One of these three subjects indicated that his relationship with his father had been gradually improving over the years, but stated that family members occasionally goad him to the point of blowing up. Another stated,

"I feel like an outcast ... I don't feel like part of the family". The third subject described the main problem in her family as "just communication". "We need more talk in the family, not just one or two people talking in the whole family". She also complained that family members "nag" at each other, and that "you have to ask before they do things".

The seven subjects who endorsed FAM scores which averaged over 60 characterized their families as being dysfunctional in most areas. These subjects included three who had had psychotic breaks which precipitated admission to the Adolescent Unit. All of these subjects had minimized their involvement with treatment resources and had rejected any kind of diagnostic labelling by the time of outcome, however.

Of the seven, one subject indicated that four areas of functioning in his family were weak, three five areas, and three six areas. All seven subjects endorsed values and norms and affective expression as problem areas. Six of these families appeared to have difficulty with task accomplishment, suggesting that the families were not able to meet the developmental needs of their members, and that minor stresses were likely to precipitate a crisis. Five of the families were characterized as having difficulty with communication, and five with affective involvement. Four subjects indicated that they had trouble in the area of role performance, and three with control.

The subjects who portrayed their families as being largely dysfunctional at the time of outcome made statements such as the following about their family life: "I always felt like they were the family and I was the extra person"; "nobody encourages anybody else--we always say to

each other that we'll never amount to anything"; "I don't really have a family ... they don't do things with me or contact me ... that's what I want"; "our main problem is the non-acknowledgement of each other"; "the biggest problem that I have is that I'm not accepted"; "I don't get affected by problems in the family"; "they did things I wasn't pleased with and fuelled my everyday hatred".

(iii) Self-Reports of Satisfaction and Happiness at Outcome

The two subjects who reported the highest scores on the Satisfaction and Happiness Scales scored within the dysfunctional range on the FAM scales, and were in the lower half of subjects on the Progress Evaluation Scale.

In light of the discrepancies between how these subjects completed the Satisfaction and Happiness Scales and their responses during the interview, it is likely that these subjects did not interpret the satisfaction and happiness scales according to their difficulties or moods. At the time of the interview one of the subjects had just started a new training program, which she was feeling optimistic about, while the other tended to blame others for his difficulties. These factors may have affected their understanding of the scales.

Aside from these two subjects, the four subjects who had the highest scores (ranging from an average of 4.77 to 5.22) included the three who were functioning well at outcome, and the subject with schizophrenia who described a very stable family life. These subjects made statements such as "things are looking up for me"; "I have a lot more friends and spend

time with more people right now"; and "I like to socialize with my friends, everyone's usually so nice".

Two subjects who had rejected treatment and the subject who had been hospitalized for several years had scores that were somewhat lower, but which were still within the average range. One of these subjects stated that she is dissatisfied with life these days "because I feel so much like I'm on the threshold ... I can see with clarity what I want but there are things pulling me back". Another declared, "The only time I'm happy is when I'm partying". The third subject said "I'm always worried about what will happen next".

Five subjects, two with long term diagnoses and three who had rejected treatment, had scores which ranged from 3.20 to 3.78, indicating dissatisfaction in all of the areas measured by the scales. Statements which were made by these subjects included the following: "I just want to sit at home and do nothing it seems ... I'm not able to get myself to do anything"; "when I was young I felt the same as other people, now I feel different because of my past"; "I'm not going out and doing as many things as I wish I could"; and "I worry about my future ... about dying, about freaking out, about doing something bad and going to jail".

Sex was not a factor in how the scores obtained for the Satisfaction and Happiness Scales were distributed. The average score for males in the sample is 4.45, while that for females is 4.37. As previously noted, the highest possible score is 7.

(iv) Community Adjustment At Outcome

As previously described, the Progress Evaluation Scale assessed outcome as a measure of seven areas--interaction with family members, occupational achievement, peer relations, fluctuation in mood, use of free time, degree of problems, and level of self-esteem.

The average score obtained by males on the Progress Evaluation Scale is 3.52, while that for females is 3.38, supporting the finding that the females were somewhat behind the males in terms of overall community adjustment. In fact, the highest scoring female was the young woman who had remained in hospital, indicating that her adjustment was to the institution, rather than to the community.

Since any score below 5 establishes that the individual has some difficulty in adjustment, it is apparent that the findings in this area support the conclusion that the large majority of subjects continued to have significant difficulties in at least some areas of their lives at outcome, while more than half had major difficulties in several areas. The subject who had no further treatment had the best outcome, followed by the other two subjects who were also functioning well and had not accepted a diagnosis.

Two of the subjects who had accepted long-term diagnoses were among those with the poorest adjustment. The subject who had accepted a diagnosis for schizophrenia who did so well on the FAM and Satisfaction and Happiness Scales scored significantly higher than these two, however, indicating the likelihood that family and social support systems play a major role in community adjustment.

As with the other scales, the majority of subjects with the poorest outcome in this area are those who had rejected treatment at the time that the interviews were carried out. Eighty-five point seven percent of subjects in this category were in the lower half of scores obtained, compared to 50 percent of those who had accepted a diagnosis at outcome.

(v) Correlation of the outcome measures

Spearman's r was used to calculate the correlation between the average scores of the three outcome measures. As only minor associations were found to exist between the Satisfaction and Happiness Scale and the FAM scale (-.2887), and between the Satisfaction and Happiness and the Progress Evaluation Scale (.2582), it was concluded that satisfaction and happiness were measures of something other than family functioning or community adjustment. A moderate association btween community adjustment and family functioning was found, however, (-.4472). This is not unexpected since the Progress Evaluation Scale include subscales on family interaction and getting along with others.

C. Overview of Significant Findings at Outcome

When the independent variables were cross-tabulated with the outcome measures, several interesting findings were suggested in the areas of family relations, interaction with treatment resources, peer relationships, attainment of educational goals, attainment of goals in the area of employment, difficulties with the law, and quality of life. These findings are briefly listed below. They will subsequently be described and discussed in greater detail.

Some of the general conclusions which emerged from the data analysis include the following:

(i) The most consistent findings in the area of family relations related to the impact of the role of the father on the subjects' reports of family functioning. The subjects' relations with their fathers had possible associations with five areas indicative of family functioning which were measured by the Family Assessment Measure. These included task accomplishment, communication, role performance, affective expression, and values and norms, as well as the average score. A possible association with community adjustment as measured by the Progress Evaluation Scale, was also found.

(ii) In contrast, the subjects' relationships with their mothers were found to have possible associations with only control issues and overall family functioning as measured by the FAM subscale for control and the FAM average score.

(iii) Subjects who were the main person in their families having problems appeared to have more problems with control issues than did subjects who came from families in which a sibling or all family members also had problems.

(iv) In the area of involvement with treatment resources, it was found that the majority of subjects who had rejected treatment appeared to have difficulty with task accomplishment, while half of the subjects who had accepted a long-term diagnosis, and all of the subjects who were functioning well and had not accepted a diagnostic label did not have trouble in this area. All of the subjects who had rejected treatment had difficulty in the area of values and norms, while all of those who had a

long-term diagnosis were within norms in this area. All of those who were functioning well and had not accepted a diagnosis, and all of those who had accepted long-term diagnosis were within norms for overall family functioning, while all of the subjects who had rejected treatment showed weakness in family functioning, as measured by the FAM average score. These findings demonstrated the affiliation between functional families and treatment resources, as well as the difficulties that subjects who characterized their families as being dysfunctional had in completing developmental tasks and meeting social expectations.

(v) Subjects who functioned well without accepting a diagnosis and without continuing treatment scored in the upper range of the Satisfaction and Happiness Scale, and the Progress Evaluation Scale, supporting their status as the best outcome subjects.

(vi) Subjects who used medication long-term indicated that their families were within norms for role performance, and for overall family functioning, while those who used medications intermittently indicated that their families were weak in the area of values and norms, as well as in overall functioning.

(vii) At the time that the subjects were assessed on the Adolescent Unit, their parents were asked about any family history of mental illness. Subjects whose parents acknowledged that a sibling or extended family member had been diagnosed with a mental illness indicated that their families were within norms for values and norms, while those whose parents gave no history of mental illness portrayed their families as being inconsistent in this area.

(viii) All of the subjects who were living in treatment resources at outcome suggested that their families were within norms for role performance, values and norms, and overall family functioning, while the majority of those who had frequent moves or remained at home portrayed their families as having difficulties in these areas.

(ix) With regard to peer relations, subjects who stated that they had an easy time making friends indicated that their families had good communication patterns, as measured by the FAM subscale for communication. These subjects also scored in the higher range of the Satisfaction and Happiness Scale.

(x) Subjects who had one or two close friends had scores in the average range of the FAM subscales for role performance and values and norms, while those who said that they had many close friends or no close friends portrayed their families as being weak in these areas.

(xi) Subjects who had difficulty making friends indicated that their families had problems in the area of control.

(xii) Those whose peer relations had improved in the intervening course had higher scores on the Progress Evaluation Scale.

(xiii) Those who were closer to peers than to family members or treatment personnel, characterized their families as being weak in the area of values and norms.

(xiv) Subjects who used drugs and alcohol frequently indicated that their families had difficulties with both role performance and values and norms.

(xv) With regard to attainment of educational goals, subjects who were able to move from an alternate setting back into the regular school

system appeared to have made the best adjustment. These subjects indicated that their families were stronger in the area of task accomplishment, as measured by the FAM subscale. These subjects also had higher scores on the Progress Evaluation Scale.

(xvi) Subjects who stated that their parents supported their educational goals indicated that their families were stronger in the area of involvement, as measured by the FAM subscale.

(xvii) Subjects who said that peer support was not important in their attainment of educational goals, characterized their families as being weak in the area of communication.

(xviii) Subjects who had major difficulties in achieving employment goals indicated that their families had problems with communication.

(xix) Subjects who had supported themselves through both social assistance and employment had higher scores for community adjustment, and indicated that their families had good communication skills.

(xx) Subjects who had had moderate difficulties with the law characterized their families as being weak in the area of control, while those who had had minor or moderate difficulties indicated that their families were weak in values and norms, and those who had had minor difficulties assessed their families to have difficulties with role performance.

(xxi) Finally, subjects who were somewhat satisfied with the quality of their lives at outcome, indicated that their families were within norms on the subscale for task accomplishment, as well as on the subscale for control.

D. Detailed Description of Relationships between Independent and Outcome Variables

As previously outlined, outcome is defined by the subjects' perceptions of how adjusted they were to life in the community, of how satisfied they were with their lives, and of how their families were functioning relative to them, five to seven years after their first psychiatric hospitalization. Although the use of chi-square analysis is not meaningful with such a small sample, it was used to point to findings which need to be reevaluated in a larger study. In the following description of the findings of this study, percentages will be reported but probability values will not, since they are not meaningful. The findings are described in seven sections, which are generally descriptive of the different categories of the independent variables. The major areas which will be examined reflect the various dimensions in which outcome can be assessed. These include family relations, interaction with treatment resources, and peer relations. In addition, findings which pertain to achievement in the areas of employment and education, and to issues arising from difficulties with the law and quality of life concerns will be mentioned.

(i) Family Relations

The most important findings in this area related to how well the subjects were getting along with their parents at the time that the interviews were conducted. The following table depicts the breakdown, by sex, of the subjects' descriptions of their relationships with each parent.

Table 7a. Relations with Parents by Sex

	With Mother					With Father			
	Males n = 8		Females n = 6			Males n = 8		Females n = 6	
	No.	%	No.	%		No.	%	No.	%
Good	5	62.5	6	100	Good	5	62.5	2	33.3
Fair	2	25.0			Fair	1	12.5	2	33.3
Poor	1	12.5			Poor	2	25.0	2	33.3

While only 50 percent of subjects reported that they had good relationships with their fathers, 78.6 percent stated that relations with their mothers were good, 14.3 percent described these as fair, and 7.1 percent as poor. Although the males in the sample were fairly consistent in how they portrayed their relationships with their parents, two-thirds of the females reported that they had fair or poor relationships with their fathers, but all of the females said that their relations with their mothers were good.

When bivariate analysis was carried out, the subjects' relationships with their father appeared to have possible associations with five of the seven aras of functioning measured by the FAM scales, as well as with the averages for the FAM and Progress Evaluation Scales. Seventy-one percent of subjects who reported a positive relationship with their fathers indicated that their families were within norms for task accomplishment, the process of problem identification and resolution which is understood to be the most basic activity of the family. In contrast, 100 percent who

said that their relationships with their fathers were fair, and 75 percent who said that they were poor, indicated that their families were weak in this area and thus had difficulties in carrying out basic tasks and responding to life cycle changes.

The same findings were made with regard to the area of communication, the process by which information necessary to task accomplishment is shared. Subjects who reported good relations with their fathers indicated that family members shared a mutual understanding, while those who stated that their relationships were fair or poor characterized communication in their families as being insufficient, displaced, or masked.

The following table depicts these results.

Table 8. Cross-Tabulation: Relationship with Father by Task Accomplishment and Communication

Relationship with Father	Within Norms n = 6		Dysfunctional Range n = 8	
	No.	%	No.	%
good	5	71.4	2	28.6
fair			3	100.0
poor	1	25	3	75.0

Close to 86 percent of subjects who reported a good relationship with their fathers had FAM scores which were within the norms for family functioning, while 66.7% who reported a fair relationship and 100% who stated that their relationship was poor had average scores in the dysfunctional range. These results are shown in the following table.

Table 9. Cross-Tabulation: Relationship with Father by FAM Average

Relationship with Father	Within Norms n = 7		Dysfunctional Range n = 7	
	No.	%	No.	%
good	6	85.7	1	14.3
fair	1	33.3	2	66.7
poor			4	100.0

Weaker associations, indicative of possible trends which bear further investigation, were found in the areas of role performance, affective expression, values and norms, assessed by the FAM Scales, and community adjustment, as measured by the Progress Evaluation Scale. As the following table shows, most of the subjects who stated that they had positive relationships with their fathers showed strength in their ability to understand what is expected and to adapt to new roles within their families. Subjects who described their reationships as fair, also demonstrated ability in this area, but to a lesser extent than those in the former group. Three-quarters of those who had poor relationships with their fathers indicated that their families had problems with role definition, as well as the tendency to ascribe idiosyncratic roles to members.

Table 10. Cross-Tabulation: Relationship with Father by Role Performance

Relationship with Father	Within Norms n = 9		Dysfunctional Range n = 5	
	No.	%	No.	%
good	6	85.7	1	14.3
fair	2	66.7	1	33.3
poor	1	25.0	3	75.0

With regard to affective expression, all subjects who had scores within the normal range reported that they had good relationships with their fathers, while all of those who said that their relationships were poor or fair indicated that there was family weakness in this area.

Fifty-seven percent of subjects who had positive relationships with their fathers, and one-third of those who had fair relationships indicated that their families were within norms for social values and norms, while all of those who said that their relationships were poor suggested that their families were weak in this area.

Finally, 57.1% of those who said that their relationships with their fathers were good had higher scores for community adjustment, while 100% who reported fair relations, and 75% who said that their relationships were poor had lower scores on the Progress Evaluation Scale.

The implication of these findings will be discussed in a subsequent chapter. It is not surprising to find that difficulties with a parent correlate with family dysfunction. It is interesting that the parent of note is the father, however, since the traditional focus on families who have a psychotic member has been on the role of the mother. In tune with a biopsychosocial emphasis, it is important to view these findings as the

result of interaction among all family members, rather than to hold the identified parent responsible for the resulting dysfunction.

Although there were no associations that appeared to have statistical significance when the quality of the relationship with the subjects' mothers was cross-tabulated with the outcome measures, two possible trends which bear further investigation were noted. Control was not characterized as an area of family weakness by 100 percent of subjects who reported a poor relationship with their mothers, nor by 72.7 percent of those who stated that their relationship was good. One hundred percent of those who described their relationship as fair did indicate that their families had problems with control, however. The results are questionable since only a few subjects, both of whom are male, indicated that they had a fair relationship with their mothers, but are nonetheless worth mentioning.

The second trend which appeared was the finding that 63.6 percent of subjects who reported positive relations with their mothers had scores that were within norms for overall family functioning, while 100 percent who described these relationships as fair or poor had scores within the dysfunctional range.

Subjects who stated that they had good relations with both parents included all of the subjects who were functioning well without continuing treatment and seventy-five percent of those who had accepted a long term diagnosis. All of the subjects who had rejected treatment indicated that they had a difficult relationship with at least one parent at outcome.

Another family variable which stood out when the data were analyzed was the one which assessed family functioning and adjustment according to

whether the subject was the main person in the family having problems, whether a sibling also had problems, whether a parent was also having physical or emotional difficulties, or whether all family members had been experiencing difficulties. Subjects scored higher on the Progress Evaluation Scales when all family members had problems, or when a sibling also had problems. When the subject was the main person in the family having difficulties, or when a parent was also having major problems, the subjects' scores were lower. The following table shows these findings.

Table 11. Cross-Tabulation: Family Problems by Progress Evaluation Scale Average

Person with Problems	Lower Scores (3.75 and under) n = 9		Higher Scores (3.75 and over) n = 5	
	No.	%	No.	%
Subject Alone	6	100.0	0	0
Also parent(s)	2	66.7	1	33.3
Also sibling	1	33.3	2	66.7
All members	0	0	2	100.0

A possible trend was indicated when this variable was cross-tabulated with the FAM subscale for control. Two-thirds of subjects who were the main family members with problems indicated that their families had issues with control, compared to only one-third who had difficulties in this area when a sibling also had problems. If a parent or all family members had problems, however, scores for control were within norms.

In summary, the most important findings in the area of family relations pertained to the quality of the relationshis that the subjects stated they had with their fathers. Fewer, weaker associations were found when the quality of the relationships with their mothers was evaluated. Subjects also tended to have a poorer adjustment at outcome when they had been the only members of their families experiencing major physical or emotional difficulties.

(ii) Interaction with Treatment Resources

Admission to the Adolescent Unit was the first hospitalization that any of the subjects interviewed had for psychiatric assessment. When they were asked to recall both the helpful and unhelpful aspects of their hospital experience, subjects had mixed responses. For many, the hospitalization marked the first time that they had been away from home for an extended period of time. In general, subjects did not fully understand the reasons behind their hospitalization, and did not remember a great deal about the experience.

Three subjects were positive in their descriptions of their hospital stay, making statements such as: "it was just kind of close, like family"; "I was mad when I had to leave because I liked it so much"; "I loved it ... sneaking food, being active, exercising, going on outings". Six subjects were ambivalent about the experience. Several of these young people complained about the lack of freedom and the structure, but believed that they had received some help and had gained some insight into their situations. One youth stated, "I've learned a lot about other people and about my weaknesses but the fact that I wasn't in the normal

world was a problem ... there were problems on every side that I had to adapt myself to". Another said, "I found I didn't have cancer. They ran over me like an autobody tune-up. The least helpful thing was getting all that medication ... anytime I showed signs of life they put me back on ... I was a Zombie". Five subjects had primarily negative memories of their hospitalization. One of these recalled being embarrassed when his parents came to see him, as he was "all drugged up" after being sedated by orderlies. Another stated, "I remember feeling as if I was supposed to remember things that I wasn't ready to ... I don't think it was good that that incident came out". A third said, "Being there had a negative influence setting up a life pattern".

The three subjects who were positive about their hospital stay were all subjects who had accepted long term diagnoses. The ambivalent subjects included the four best outcome subjects, one of whom had accepted a long term diagnosis, and three who were functioning well and had not accepted a diagnostic label. All of the subjects who described the assessment experience in negative terms and two of those who were ambivalent were in the group who had rejected treatment.

The treatment experience of subjects in the intervening course varied. As previously noted, one subject was discharged prematurely, and had no further treatment. Three subjects had minimal treatment, engaging for brief periods of time since discharge with a private practitioner or at a Mental Health team. Six subjects received moderate treatment--five of these for about two years at the Maples, and one through a series of private psychiatrists. The remaining four subjects received extensive treatment. One was hospitalized long term, and the others were treated at

the Maples, and then consistently, by a private practitioner, outpatient department, or mental health team. Eight of the 14 subjects were thus treated post-discharge in a residential program at the Maples.

When variables pertaining to the treatment experience were cross-tabulated with the outcome measures, several significant findings were suggested. The most impressive findings in this area confirm previous indications that subjects who had rejected treatment had the most difficulty at outcome. For example, as the following table shows, all of the subjects who were functioning well without ongoing treatment, and fifty percent of those who had accepted a diagnosis indicated that their families were within the norms for task accomplishment on the FAM Scales. Eighty-five point seven percent of those who had rejected treatment characterized their families as being weak in this area, however, suggesting that difficulties in accepting help may be characteristic of families who have trouble carrying out developmental goals.

Table 12. Cross-Tabulation: Diagnostic Status by Task Accomplishment

Diagnostic Status	Within Norms n = 6		Dysfunctional Range n = 8	
	No.	%	No.	%
Has accepted diagnosis	2	50.0	2	50.0
Functioning well, no diagnosis	3	100.0	0	0
Has rejected treatment and diagnosis	1	14.3	6	85.7

Eleven subjects indicated that their families had difficulty in expressing emotion (affective expression). These subjects included 100 percent of those who had rejected treatment, 75 percent who had accepted a current diagnosis, and 33.3 percent who had not accepted a current diagnosis and were functioning well.

The strongest associations for the variable which pertained to diagnostic status were found when cross-tabulations were carried out with the subscales for values and norms, and with the FAM average score. All of the subjects who had accepted a current diagnosis and 33.3 percent of those who were functioning well and had not accepted a diagnosis fit the norms for values and norms. All of those who had rejected treatment showed weakness in this area. The suggestion here, as depicted in the following table, is that families whose internal value systems are consistent with those of the greater society are more likely to support an engagement with treatment resources, and to accept a diagnosis for a family member.

Table 13. Cross-Tabulation: Diagnostic Status by Values and Norms

Diagnostic Status	Within Norms n = 5		Dysfunctional Range n = 9	
	No.	%	No.	%
Has accepted a diagnosis	4	100.0	0	0
Has rejected treatment and diagnosis			7	100.0
No current diagnosis, functioning well	1	33.3	2	66.7

With regard to overall family functioning, 100 percent who had accepted a diagnosis at outcome, and 100 percent who were functioning well and had not accepted a diagnosis, characterized their families as being within norms, while all of the subjects who had rejected treatment indicated that their families were largely dysfunctional.

Associations were also found for this variable and the Satisfaction and Happiness Scale and Progress Evaluation Scale average scores. All of the subjects who were functioning well and had not accepted a diagnosis scored in the upper range of the Satisfaction and Happiness Scales, while 71.4 percent of those who had rejected treatment, and 75 percent of those who had accepted a long-term diagnosis scored in the lower range.

Table 14. Cross-Tabulation: Diagnostic Status with Satisfaction and Happiness Score

Diagnostic Status	Upper Range (4.6 and higher) n = 6		Lower Range (4.5 and lower) n = 8	
	No.	%	No.	%
No current diagnosis, functioning well	3	100.0	0	0
Has accepted diagnosis	1	25.0	3	75.0
Has rejected treatment and diagnosis	2	28.6	5	71.4

All of the subjects who had not accepted a diagnosis and were functioning well were also in the higher range of scores on the Progress Evaluation Scale, while 75 percent of those with a diagnosis and 85.7 percent who had rejected treatment were in the lower range.

Table 15. Cross-Tabulation: Diagnostic Status with Progress Evaluation Scale

Diagnostic Status	Upper Range (3.75 and higher) n = 5		Lower Range (3.74 and lower) n = 9	
	No.	%	No.	%
Has accepted diagnosis	1	25.0	3	75.0
Has rejected treatment and diagnosis	1	14.3	6	85.7
No current diagnosis, functioning well	3	100.0		

These findings confirm the status of the subjects who were functioning well and did not have a diagnosis as the best outcome subjects. They also point to the conclusion that subjects who accepted a long term diagnosis and those who rejected treatment varied in outcome status, but that as a group, those who rejected treatment had a somewhat poorer outcome. It can be suggested that the acceptance of a diagnosis implies the acceptance of some degree of impairment as well as a sense of security derived from the support systems made available to individuals who have accepted their impairment. Even though it is difficult to obtain validity with regard to diagnosis without a high relation of agreement among several therapists (Cutler, Tatum, & Shore, 1987), and though diagnosis itself is not a good predictor of outcome, the findings here also suggest that, with the exception of one individual, subjects who accept treatment have a better outcome than those who do not. Those who

accept treatment include individuals who will eventually move out of the treatment system and those who will remain in it. Acceptance of treatment also appears to involve the acceptance of social values and norms.

During the interview, subjects were asked several questions about their use of medication in the course of their treatment experience. At the time of outcome, four subjects had been on medications of one sort or another since their discharge from the Adolescent Unit, six had had medication trials at different times, but had not stayed on any medication, and four had not taken medications at all. Antipsychotic medications were the main ones used with this group, followed by antidepressants. Some subjects had also received sedatives or antianxiety medications. In general, the subjects who were on medications for the long-term found that at least some of the drugs tried were very helpful, while those who used medications sporadically did not find them particularly helpful and did not remember much about their use. All four of the subjects who were on medications long-term had accepted long term diagnoses.

When the variable pertaining to the use of medications was cross-tabulated with the outcome measures, findings were similar to those which related to diagnostic categories. All of the subjects who were on medications for a long term, and 75 percent of those not on medications at all indicated that their families were within norms for role performance, suggesting that they were able to adapt to new roles required in the development of the family. In contrast, two-thirds of subjects on medications intermittently characterized their families as having weakness in this area. The following table shows these findings.

Table 16. Cross-Tabulation: Medication Use by Role Performance

Medication Use	Within Norms n = 9		Dysfunctional Range n = 5	
	No.	%	No.	%
Long term	4	100.0		
Intermittent	2	33.3	4	66.7
Not at all	3	66.7	1	33.3

The implication here is that the use of medication helped the long-term subjects to function more effectively within their families, and that support for this use was also a result of effective family functioning in the area of role performance.

Use of medication was also found to have an association with the families' acceptance of social values and norms. All of the subjects who used medications long term indicated that their families were within norms in this area. All of those who used medications intermittently, and seventy-five percent not on medications at all, suggested that family values and norms were weak.

Table 17. Cross-Tabulation: Medication Use by Values and Norms

Medication Use	Within Norms n = 5		Dysfunctional Range n = 9	
	No.	%	No.	%
Long term	4	100.0		
Intermittent			6	100.0
Not at all	1	25.0	3	75.0

The findings here do not pertain to the efficacy of the use of medication--they merely suggest that adherence to social values and norms is associated with the tendency of families of the subjects interviewed to support their long term usage.

A third finding in the area of medication usage was that all of the subjects who used medications long term, 50 percent who did not use them at all, and only 16.7 percent of those who used them intermittently had scores in the average range for overall family functioning, while 83.3 percent on medication intermittently and 50 percent not on medications at all had scores in the dysfunctional range.

Table 18. Cross-Tabulation: Medication Usage by FAM Average Score

Medication Usage	Within Norms n = 7		Dysfunctional Range n = 7	
	No.	%	No.	%
Long term	4	100.0		
Intermittent	1	16.7	5	83.3
Not at all	2	50.0	2	50.0

These findings put the previous findings in perspective. As already noted, all of the subjects who had accepted a diagnosis at outcome, and all of those who were functioning well without accepting a diagnosis indicated that their families were within the norms for family functioning, while all of those who had rejected treatment portrayed their

families as being weak in overall functioning. The subjects who were functioning well included one who was discharged from the Adolescent Unit against medical advice who received no further treatment, and two who had received treatment and had improved enough not to require further intervention by the time of outcome. Of these three subjects, one had been on medications intermittently, and two had not received any since their assessment period at VGH. As will be shown in later discussion, the subject who was discharged against medical advice probably did not belong in a psychiatric system. The other two were able to benefit from various forms of treatment, and to pass out of the treatment system.

The five subjects who used medications intermittently who indicated that their families were dysfunctional, and the two who were not on medications at all who indicated that their families were weak in overall functioning were all subjects who were both difficult to assess and who were themselves resistant to involvement with treatment resources.

Some possible trends with regard to the amount of treatment received also bear mention. For example, as the following table shows, the more treatment subjects had, the more likely they were to succeed in the area of task accomplishment. This suggests that the treatment process may have helped both the subjects and their families to complete development tasks.

Table 19. Cross-Tabulation: Extent of Treatment by Task Accomplishment

Treatment Length	Within Norms n = 6		Dysfunctional Range n = 8	
	No.	%	No.	%
No further	1	100.0		
Minimal			3	100.0
Moderate	2	33.3	4	66.7
Extensive	3	75.0	1	25.0

Family values and norms and the level of family functioning also appear to play a part in the family's decision to support an extensive course of treatment. Seventy-five percent of subjects who received extensive treatment and one-third of those who received moderate treatment indicated that their family values were within social norms. Three-quarters of subjects who had extensive treatment and one-half of those who had moderate treatment indicated that their families fit the norms for overall family functioning, while all of the subjects who had minimal treatment indicated that their families were dysfunctional in most areas.

Some light may be thrown on the families' attitudes toward the whole issue of mental illness by the results of the cross-tabulation of the variable pertaining to a family history of mental illness with the outcome measures. The dependent variable which again stood out when the data was analyzed was the social values and norms subscale on the FAM Scale. At the time of assessment on the Adolescent Unit, the parents or guardians of

the subjects were asked to describe any family history of mental illness. Four subjects had at least one parent who had been diagnosed as having a psychiatric illness, two an extended family member, and two a sibling, while the parents of five of the subjects denied any history. Data could not be obtained in this area for one subject. When the results were analyzed, it was found that all of the subjects who had either an extended family member or a sibling who had been diagnosed endorsed scores which were within the norms for values and norms, while 75 percent of those who had a parent with an illness and 100 percent of those whose parents had denied any family history of illness indicated that their families were weak in this area.

Table 20. Cross-Tabulation: Family History of Mental Illness by Social Values and Norms

Member(s) with Illness	Within Norms n = 5		Dysfunctional Range n = 9	
	No.	%	No.	%
Parent(s)	1	25.0	3	75.0
Sibling or extended	4	100.0		
None reported			5	100.0
Missing value			1	

A surprising finding here is that the subjects who have a sibling or extended family member who has a psychiatric diagnosis are the subjects who have accepted long term diagnoses, and who have received extensive treatment. The subject who had a parent with a previous history of

psychiatric involvement who was within the norms was one of the better outcome subjects who had benefitted from treatment and was functioning well at outcome. This suggests that acceptance of mental illness and of the need for treatment related to the family's previous experience, as well as to the family's level of functioning. It may be that the fear of stigmatization as well as the lack of adherence to social values and norms had inhibited the parents of other subjects in being forthcoming about the existence of patterns of illness in their families.

The residential status of the subjects during the intervening period also appears to have an important relationship with the subjects' acceptance of or denial of the need for ongoing treatment. The ability to leave home and to establish oneself in the world marks the completion of an important developmental phase during late adolescence. The subjects interviewed for this study appear to have had some difficulty in carrying out this developmental task.

Only five of the 14 subjects, or 35.7 percent, were living on their own at the time of outcome. An equal number remained at home, and the remaining four, representing 28.6 percent, lived in treatment resources (one in three-quarter housing, two in boarding homes, and one in hospital). Of the better outcome subjects, one who was functioning well without accepting a diagnosis lived in three-quarter housing, the subject with schizophrenia who did well lived in a boarding home, one remained at home while he was going to school, and one had a pattern of moving from place to place. In the marginal outcome group, two subjects had a pattern of frequent moves, one was maintained by his family in an apartment because of family conflict, and one lived in a treatment setting. Three

of the subjects who remained at home, one who moved around, and one who was in a treatment setting were in the group with the poorest adjustment. Four of the subjects who were living on their own, and three of those living at home, had rejected treatment.

When the variable representing residential status was cross-tabulated with the outcome measures, associations were found with the FAM subscales for role performance and values and norms, and a possible association with the FAM average score. All of the subjects who were living in treatment resources indicated that their families functioned within norms for role performance, while 80 percent of those who remained at home, and one-quarter of those who moved around a lot indicated that their families were weak in this area. The subject maintained by his family in an independent setting also portrayed his family as being weak in the area of role performance.

Table 21. Cross-Tabulation: Residential Status by Role Performance

Residence	Within Norms n = 9		Dysfunctional Range n = 5	
	No.	%	No.	%
Treatment resource	4	100.0		
At home	4	80.0	1	20.0
Inconsistent	1	25.0	3	75.0
Independent			1	100.0

Furthermore, all of the subjects who were living in treatment resources at outcome and 20 percent of those who remained at home

suggested that their families were within the average range for social values and norms. Eighty percent of those who remained at home and all of those who had moved around or lived independently characterized their families as being weak in this area of the FAM scale.

Table 22. Cross-Tabulation: Residential Status by Values and Norms

Residence	Within Norms n = 5		Dysfunctional Range n = 9	
	No.	%	No.	%
Treatment resource	4	100.0		
At home	1	20.0	4	80.0
Inconsistent			4	100.0
Independent			1	100.0

A possible trend which could be explored in a larger study is indicated by the finding that all of the subjects who were in treatment resources, 40 percent who were at home, and 25 percent who moved around a lot indicated that their families' overall functioning was in the average range. In contrast, three-quarters of those who moved around, 60 percent who stayed at home, and the subject who lived independently had average scores on the FAM scale within the dysfunctional range.

Table 23. Cross-Tabulation: Residential Status by FAM Average Score

Residence	Within Norms n = 7		Dysfunctional Range n = 7	
	No.	%	No.	%
Treatment resource	4	100.0		
At home	2	40.0	3	60.0
Inconsistent	1	25.0	3	75.0
Independent			1	100.0

It appears that the subjects who had left home experienced conflict with their families regarding role definition, experienced confusion with regard to family and social values, and were likely to have come from families which were largely dysfunctional. The opposite appeared to be true of those who were in treatment resources. Of those who remained at home, only one suggested that his family had difficulty with role performance, while four characterized their families as being inconsistent in the area of values and norms, and three appeared to come from families which showed dysfunction in most other areas. Family problems may have played a part in the difficulties subjects had in leaving.

Several important findings were thus suggested in the area of the subjects' interaction with treatment resources. Subjects who functioned well at outcome who had not accepted a diagnostic label characterized their families as being within norms for task accomplishment, indicating that these families were able to carry out developmental goals. These

subjects had higher scores on the Satisfaction and Happiness Scales, and on the Progress Evaluation Scales, confirming their status as the best outcome subjects.

Those who had accepted long term diagnoses portrayed their families as being particularly strong in the area of values and norms. These subjects had used medications on a long term basis, and this usage appeared to be associated with effective family functioning in the areas of role performance and values and norms, as well as with effective overall functioning at outcome. All of the subjects who had accepted a long term diagnosis had either a sibling or extended family member who had also been diagnosed for mental illness. One of these subjects had scores in the higher ranges of the Satisfaction and Happiness, and Progress Evaluation Scales, while three had scores in the lower ranges.

Subjects who had rejected ongoing involvement with the treatment system and a diagnostic label indicated that their families were weak in the areas of task accomplishment, values and norms, and overall functioning. Six out of seven of these subjects scored in the lower range of the Progress Evaluation Scale, while five had scores which were in the lower ranges of the Satisfaction and Happiness Scales. These subjects were also likely to have used medications on an intermittent basis, or not at all, and to describe their families as having difficulties with role performance. As well, the families of these subjects were more likely to have denied any history of mental illness when the subjects were hospitalized on the Adolescent Unit.

A final finding related to involvement with treatment resources, was that subjects who were living in residential settings which were connected

to treatment resources were more likely to characterize their families as being functional than either subjects who had remained at home, or those who had left home and were on their own. This suggests that treatment facilities played a role in helping the subjects and their families to complete the critical developmental tasks of adolescence.

(iii) Peer Relationships

During the interview, subjects were asked several questions about their peer relationships and friendships. As numerous authors have emphasized (Eisenberg, 1969; Erikson, 1982; Mahon, 1983; Maccoby, 1988), peer relationships in adolescence are critical to the completion of developmental tasks such as identity formation and separation from the family, as well as to the development of satisfying relationships in adulthood. Maccoby (1988) also points out that the lack of friendship, or unpopularity, is one of the most potent sources of distress from about school-entry-age on. For the purpose of this study, a friend was defined as a person that the subject spent time with, talked with on the phone regularly, and confided in about personal things.

Three variables pertaining to peer relationships were found to be associated with the outcome measures. The first of these was the ease with which subjects were able to make friends. Subjects were asked to indicate whether friendships came easily for them, whether they had moderate difficulty in making friends, or whether friendships were very difficult for them to make. Four subjects stated that friendships came easily, while three said that they were made with moderate difficulty and seven with a lot of difficulty.

The strongest associations for this variable were found with the FAM subscale for communication, and the Satisfaction and Happiness average score. The following tables describe these findings.

Table 24. Cross-Tabulation: Ease of Friendships by Communication

Ease	Within Norms n = 6		Dysfunctional Range n = 8	
	No.	%	No.	%
Easy	3	75.0	1	25.0
Moderate difficulty	2	66.7	1	33.3
Much difficulty	1	14.3	6	85.7

The implication is that families which have good patterns of communication promote the ability of their members to make friendships.

Table 25. Cross-Tabulation: Ease of Friendships by Satisfaction and Happiness

Ease	Higher Range (4.6 and higher) n = 6		Lower Range (4.5 and lower) n = 8	
	No.	%	No.	%
Easy	3	75.0	1	25.0
Moderate difficulty	2	66.7	1	33.3
Much difficulty	1	14.3	6	85.7

Again, the suggestion is that the ability to make friends is an important determinant of satisfaction.

Possible trends for this variable were found between this variable and the FAM subscales for affective expression and control, and the Progress Evaluation Scale average score. Two-thirds of subjects who indicated that their families were within norms for affective expression, stated that they made friends easily, while one-third said that they had only moderate difficulty with friendships. All of the subjects who said that they had a lot of trouble with friendships were weak in this area. As well, all of the subjects who made friends easily endorsed scores in the normal range for control, compared to two-thirds who had moderate difficulty and 42.9 percent who had a lot of trouble. Three-quarters of those who made friends easily had higher scores for community adjustment, compared to one-third who had moderate difficulty, and 14.3 percent who had a lot of difficulty.

These findings suggest that ease in making friends is associated with ability to express feeling, and is inhibited by families which have difficulties with control. They also suggest that those who have an easier time making friends adjust more readily to life in the community.

Three of the four better outcome subjects stated that they made friends easily, while one reported that he had moderate difficulty. All five of the poorest outcome subjects reported that they had a lot of trouble with peer relationships. As well, three of the four subjects who accepted a long term diagnosis described peer relationships as being very difficult, while one said that she made friends with ease. A mixed

response was found among subjects who had rejected ongoing treatment and a diagnostic label.

Subjects were also asked to define the number of close friends that they had. When the data were analyzed, the number of friends identified were categorized into three groups, none identified, one to two close friends, and three or more close friends. This variable appeared to be associated with role performance and values and norms, on the FAM scale, and to have a possible association with the Satisfaction and Happiness average score.

As the following table shows, all of the subjects who had one or two close friends indicated that their families were within norms for role performance, compared to two-thirds of those who reported no close friends, and one-third of those who stated that they had three or more friendships. In contrast, two-thirds of those who stated that they had three or more close friends portrayed their families as being weak in this area. This finding suggests that subjects turn to peers less when they are secure about their roles in their families, while those who turn more to peers for support are not sure of where they stand in their families.

Table 26. Cross-Tabulation: Friendships by Role Performance

Friendships	Within Norms n = 9		Dysfunctional Range n = 5	
	No.	%	No.	%
None	2	66.7	1	33.3
1-2	5	100.0		
3 or more	2	33.3	4	66.7

All of the subjects who said that they had three or more close friends, two-thirds who had no close friends, and only one-fifth who had one or two close friends characterized their families as being weak in the area of values and norms.

Table 27. Cross-Tabulation: Friendships by Values and Norms

Friendships	Within Norms n = 5		Dysfunctional Range n = 9	
	No.	%	No.	%
None	1	33.3	2	66.7
1-2	4	80.0	1	20.0
3 or more			6	100.0

This suggests that one to two close peer relationships are a norm, and that friendships are facilitated by an understanding among family members of role expectations and the ability to adapt to requirements for new role development. Subjects who portrayed their families as being weak in the area of role performance may have felt the need to sacrifice their peer relationships in order to maintain idiosyncratic roles which would help to stabilize their families.

In contrast to these findings, which indicated that family stability promotes fewer peer relationships, a possible trend was found in the association between this variable and the Satisfaction and Happiness Scale average score. Two-thirds of the subjects who reported that they had three or more friends had higher scores for Satisfaction and Happiness

compared to 40 percent who had one or two close friends, and no subjects who had no close friends. It seems likely that subjects reporting larger friendship circles compensated for difficulties in their family lives by turning to the peer group for support, and, in turn by placing a higher value on numbers of friends, rather than on quality of friendships. Four of the subjects who appeared to be more peer-oriented had rejected treatment, and were among those who had left home to live on their own.

Findings for a third variable in the area of peer relations were similar to those reported with the variable which described the ease with which subjects made friends. An association was found with the FAM subscale for control as well as with the Progress Evaluation Scale average score when subjects were asked whether their peer relationships had improved, stayed the same, or deteriorated since discharge from the Adolescent Unit. Control was not an issue for 85.7 percent of those who said that their relationships had improved, or for sixty percent who said that relationships with peers were about the same. All of those who reported that relationships had deteriorated, indicated that their families had difficulty with control, however.

Table 28. Cross-Tabulation: Peer Relationships by Control

Relationships	Within Norms n = 9		Dysfunctional Range n = 5	
	No.	%	No.	%
Improved	6	85.7	1	14.3
Remained the same	3	60.0	2	40.0
Deteriorated			2	100.0

Two of the subjects who reported family weakness in the area of control had accepted long term diagnoses, while three had rejected treatment. One of each of these groups reported that peer relationships had deteriorated in the intervening course.

All of the subjects who stated that peer relationships had improved were in the higher range on the Progress Evaluation Scale, indicating that improvement in peer relations was indicative of better overall adjustment. The following table shows this finding.

Table 29. Cross-Tabulation: Peer Relationships by Community Adjustment

Relationships	Upper Range n = 5		Lower Range n = 9	
	No.	%	No.	%
Improving	5	71.4	2	28.6
Same			5	100.0
Deteriorated			2	100.0

Previous findings were confirmed when subjects were asked whether they felt closest to family members, treatment personnel, or peers. When this variable was cross-tabulated with the outcome measures, there appeared to be an association between who the subjects identified and the families' social values and norms. Two-thirds of the subjects who said that they were closer to their families, and one-half who said that they were closer to someone involved in their treatment experience indicated

that their families were within norms in this area, while all of the subjects who said that they were closer to peers characterized their families as being weak in their acceptance of internal and external value systems, as measured by the FAM subscale for values and norms.

Table 30: Cross-Tabulation: Closeness by Values and Norms

Closest Group	Within Norms n = 5		Dysfunctional Range n = 9	
	No.	%	No.	%
Treatment personnel	1	50.0	1	50.0
Family members	4	66.7	2	33.3
Peers			6	100.0

A trend was suggested by the finding that all of the subjects who were closer to treatment personnel and 83.3 percent of those who were closer to family members indicated that their families were within norms for role performance, compared to only one-third who stated that they were closer to peers. Once again, the suggestion is that peer relationships may be particularly important for young people who are having difficulty in several areas of their lives, who are not able to resolve problems with help from parents or other significant adults.

As previously noted, subjects who had three or more friends also indicated that their families were weak in the areas of role performance and social values and norms. Similar associations were found when the subjects' pattern of drug usage was cross-tabulated with the outcome

measures. Seventy-five percent of those who used drugs one or more times a week, and 40 percent who used them occasionally placed their families in the dysfunctional range on the role performance subscale, while all of those who did not use drugs at all described their families as being within norms for role performance.

Table 31. Cross-Tabulation: Drug Usage by Role Performance

Pattern of Usage	Within Norms n = 9		Dysfunctional Range n = 5	
	No.	%	No.	%
Regular	1	25.0	3	75.0
Occasional	3	60.0	2	40.0
Not at all	5	100.0	0	0

All subjects who used drugs frequently also indicated that their families were weak in the area of values and norms, as did 80 percent of those who used them occasionally, and only twenty percent who did not use them at all.

Table 32. Cross-Tabulation: Drug Usage by Values and Norms

Pattern of Usage	Within Norms n = 5		Dysfunctional Range n = 9	
	No.	%	No.	%
Regular			4	100.0
Occasional	1	20.0	4	80.0
Not at all	4	80.0	1	20.0

A similar association was found between the variable for alcohol use and the values and norms subscale, as shown in the following table.

Table 33. Cross-Tabulation: Alcohol Usage by Values and Norms

Pattern of Use	Within Norms n = 5		Dysfunctional Range n = 9	
	No.	%	No.	%
Regular			4	100.0
Occasional	3	37.5	5	62.5
Not at all	2	100.0		

Three of the four regular drug users were subjects who had rejected treatment. It may be that these subjects used drugs as a means of controlling depression or other symptoms. It is also likely that drug and alcohol use facilitated peer relationships for many of the subjects who had difficulty making friends.

In summary, subjects who made friends with ease indicated that their families had good patterns of communication and handled control issues well. These subjects also had higher scores on the Satisfaction and Happiness Scales, and did better on the Progress Evaluation Scale.

All of the poorest outcome subjects, two of whom had accepted a diagnostic label, and three of whom had rejected treatment, stated that they had a lot of trouble with peer relations.

Subjects who had one or two close friends indicated that their families were within norms for role performance and values and norms.

These subjects also stated that they were closer to family members than to peers. Subjects who said that they had three or more close friendships characterized their families as being weak in the areas of role performance and values and norms, as did those who used drugs and alcohol on a regular basis. These subjects indicated that they were closer to peers than to family members.

Finally, subjects who stated that their relationships with peers had deteriorated since their discharge from the Adolescent Unit characterized their families as having difficulty with control issues.

(iv) Attainment of educational goals

At the time of hospitalization on the Adolescent Unit, all of the subjects were in the process of realizing educational goals. An effect of their deterioration and hospitalization was the need for the subjects to adjust from educational settings which were in the mainstream to those which were included as part of a therapeutic milieu, and then to readjust at the time of discharge. The eight subjects who received residential treatment at the Maples following hospitalization at Vancouver General Hospital were out of the mainstream for a period of a year to two years.

All of the subjects reported that they had experienced difficulty in completing their education. Many indicated that this discomfort resulted from low levels of self-esteem, or from feelings that they did not really fit into the educational system. As one subject said, "High school wasn't right for me and wasn't working out". Another stated, "I've never done well in school and it took a lot of effort for me to do good work". Some subjects admitted to giving in to the pressure of peers who would

encourage them to skip classes. Others reported that symptoms of their illnesses made it difficult to continue. "I wasn't that well mentally ... I couldn't handle it and locked myself in my room", said one. Another stated, "I went to school and then quit because I found it too much at once ... the kids picked on me". One subject who had a further period of hospitalization following her stay at VGH said that she had wanted to go back to school when she got out of hospital but did not as she felt out of place since she had fallen behind and was older than other students in her class.

Following discharge from the Adolescent Unit, three subjects dropped out of school and did not return, four remained in the alternate school system, five were admitted to an alternate program and then later reentered the regular system, and two remained in the regular system. Five subjects completed Grade 12, seven Grade 10, and two Grade 8. Three subjects have gone on to take university level or community college courses. The following table shows educational achievement by diagnostic status at outcome.

Table 34. Educational Achievement by Diagnostic Status

Educational Level	Diagnostic Status					
	Functioning well, no diagnosis		Rejected treatment & diagnosis		Accepted long-term diagnosis	
	No.	%	No.	%	No.	%
Grade 12	2	40.0	2	40.0	1	20.0
Grade 10	1	12.5	4	50.0	2	37.5
Grade 8			1	50.0	1	50.0

Some interesting findings were made when variables pertaining to the subjects' educational experience were cross-tabulated with the outcome measures. For example, all of the subjects who dropped out of school at the time of discharge from the Adolescent Unit, and 60 percent of those who went from the alternate back into the regular school system indicated that their families were within norms for task accomplishment, i.e., for their ability to complete developmental tasks. All of those who remained in the alternate, or in the regular systems indicated that their families were weak in this area.

Table 35. Educational Setting by Task Accomplishment

Setting	Within Norms n = 6		Dysfunctional Range n = 8	
	No.	%	No.	%
Alternate			4	100.0
Regular			2	100.0
Alternate-regular	3	60.0	2	40.0
Drop out	3	100.0		

This variable was also associated with community adjustment, as measured by the Progress Evaluation Scale. Eighty percent of subjects who moved from the alternate to the regular systems and one-third of those who dropped out of school were in the higher range of adjustment, while two-thirds of those who dropped out and all of those who stayed in either the alternate or regular systems were in the lower range.

Table 36. Educational Setting by Community Adjustment

Setting	Higher Range (3.75 and over) n = 5		Lower Range (3.74 and lower) n = 9	
	No.	%	No.	%
Alternate			4	100.0
Regular			2	100.0
Alternate-regular	4	80.0	1	20.0
Drop out	1	33.3	2	66.7

Possible trends were indicated by the findings that all of the subjects who went from the alternate to the regular system, two-thirds of those who dropped out, and 50 percent who stayed in the regular system portrayed their families as being within norms on the control subscale, while 75 percent of those who stayed in the alternate system and one-half who stayed in the regular system depicted their families as being weak in this area.

As well, 80 percent of subjects who went from the alternate to the regular systems, one-third of those who dropped out, and 25 percent who remained in an alternate program had higher scores on the Satisfaction and Happiness scales, while all of those who stayed in the regular system had lower scores.

The best adjusted subjects thus appeared to be those who were able to move from an alternate setting, which they required when they were not functioning well, back into the regular system, which they were able to

reenter once they had stabilized. Four of the five subjects who followed this pattern attended school at the Maples before reentering the regular system.

It was interesting to find that the three subjects who dropped out of school depicted their families as being within norms for task accomplishment, and that one of these subjects scored within the higher range of the Progress Evaluation Scale, indicating a positive adjustment to community life. Two of these subjects had accepted long-term diagnoses at outcome, while a third had rejected treatment for extended periods of time, and remained extremely difficult to diagnose. It is likely that these subjects were supported in dropping out of school as an acknowledgement of the need to reduce stress in their lives.

On the other hand, the finding that subjects who remained in either the alternate system or in the regular system depicted their families as being weak in the areas of task accomplishment and control, suggests that an approach which included work with the families might have helped the subjects to function more effectively in a school setting.

In tune with this observation is the finding that all of the subjects who said that their parents supported their educational goals indicated that their families were within norms on the involvement subscale, while 83.3 percent who indicated that their parents' support was not an important factor, and all of those who felt that their parents were critical of their educational goals, endorsed scores which demonstrated that family members had problems with involvement.

Table 37. Cross-Tabulation: Parental Support by Involvement

	Within Norms n = 7		Dysfunctional Range n = 7	
	No.	%	No.	%
Parents supportive	6	100.0		
Not important	1	16.7	5	83.3
Parents critical			2	100.0

Parental support in reaching educational goals was also associated with the subscale for role performance. All of those who described their parents as being supportive indicated that their families were within norms in this area, while 50 percent for whom support was not an important factor, and all of those who stated that their parents criticized their goals indicated that family roles were not well integrated, and that members had difficulty adapting to new roles, as well as a tendency to take on idiosyncratic roles.

Table 38. Cross-Tabulation: Parental Support by Role Performance

	Within Norms n = 9		Dysfunctional Range n = 5	
	No.	%	No.	%
Parents supportive	6	100.0		
Not important	3	50.0	3	50.0
Parents Critical			2	100.0

The only outcome measure that appeared to be related to peer support was the subscale for affective expression. Two-thirds of subjects who described peers as having a negative influence on them by encouraging them to skip classes, and one-third of those who stated that peers supported their educational goals indicated that their families were within norms for affective expression. All of those who said that peer involvement was not an important factor in their attainment of educational objectives indicated that their families had difficulty expressing their feelings.

Table 39. Cross-Tabulation: Peer Support by Affective Expression

	Within Norms n = 3		Dysfunctional Range n = 11	
	No.	%	No.	%
Peers supportive	1	33.3	2	66.7
Peers negative influence	2	66.7	1	33.3
Peers not important			8	100.0

Although no conclusive associations were found when the variable for teacher support was cross-tabulated with the outcome measures, some associations which warrant further investigation bear mention. All of the subjects who indicated that teachers did not support their educational efforts depicted their families as being weak in the area of values and norms, compared to 50 percent who felt supported by teachers and 40 percent who did not feel one way or the other. As well, 75 percent who felt that teachers supported them had higher scores on the Progress

Evaluation scales, compared to 20 percent who felt that teachers were critical, and 20 percent for whom teacher support was not important. The implication of these findings is that conformity to social standards may promote teacher involvement, which may in turn, promote community adjustment. It is of note that only four of the subjects described their involvement with teachers as being supportive, while five felt that their interaction was negative, and five that it was not important. The impression left is that school was a source of conflict and non support to a fragile group, particularly for those who characterized their families at outcome as having difficulty in completing developmental tasks, with issues pertaining to roles, or with control issues.

In summary, subjects who moved from the alternate school system back into the regular system appeared to have made a better adjustment than those who stayed either in the alternate system or in the regular system. These subjects and those who dropped out of school shortly after discharge from the Adolescent Unit, characterized their families as being within norms for task accomplishment, while other subjects indicated that their families were weak in this area at outcome. Subjects who moved from the alternate to the regular system also had higher scores on the Progress Evaluation Scale, and on the Satisfaction and Happiness Scales.

Subjects whose parents supported their educational goals portrayed their families as being within norms on the affective involvement and role performance subscales. On the other hand, negative or positive support from peers appeared to be associated with the subjects' ascription of normal functioning in the area of affective expression to their families. Subjects who received support from teachers did better on the Progress

Evaluation Scales, and were more likely to characterize their families as being within norms on the values and norms subscale than subjects who did not feel supported by teachers in achieving educational goals.

(v) Attainment of goals in the area of employment

It is understandable that a group of subjects who in general experienced difficulties in the eductional system would also have trouble participating in the work force. At the time of outcome only three subjects had fairly stable employment patterns. These three had all completed Grade 12, and had also been able to secure and keep jobs for extended periods of time. Two of them were functioning well without a diagnosis, while the third had rejected treatment. One of these subjects declared, "High school wasn't right for me and wasn't working out ... I knew I wanted to be a mechanic and so went to College". This subject had held a job for several years at a local restaurant, and described his boss as being "like a father". He believed that this man would help him to get a good job at a local auto dealership when he was ready. Another subject believed that his parents' support and his own motivation were major factors in his ability to secure and keep a job. "Ever since I've moved out I've become closer to my parents", he stated. The third subject had had ongoing problems, but attributed her ability to hold jobs to her "perfectionism" and hard work. "I can present in a good way at an interview", she said. This subject was employed as an Employment Counsellor at the time that she was interviewed.

Four subjects had worked at a variety of jobs for short periods of time but had trouble keeping jobs. One believed that her lack of

experience was a deterrent. She also stated that family members were not always supportive of the type of job that she applied for. "Sometimes my dad would be critical of the job but he'd know I had to get some kind of job", she said. Another subject also said that lack of parental support made it difficult for him to follow through with jobs. "Sometimes my parents were hard on me ... after awhile it puts a damper on things", he stated. Another attributed his difficulty in holding jobs to poor self-motivation, a lack of confidence and an "attitude problem".

Seven of the subjects had worked minimally or not at all in the regular work force since their hospitalization. These subjects included all of those who had accepted a long-term diagnosis at outcome, as well as three subjects who had rejected ongoing treatment and diagnosis. Lack of confidence, poor motivation, inability to handle stress, difficulties with temper management, lack of experience, and inability to get along with people were some of the factors which these subjects said made it difficult for them to get or keep jobs.

The only outcome measure which appeared to be associated with the pattern of employment was the Progress Evaluation Scale average score. Not surprisingly, all of the subjects who had worked steadily were in the higher range on this scale, as were 25 percent who had worked irregularly, and 14.3 percent who had worked minimally.

Table 40. Cross-Tabulation: Employment Pattern by Progress Evaluation Scale

Employment Pattern	Higher Range (3.75 and over) n = 5		Lower Range (3.74 and lower) n = 9	
	No.	%	No.	%
Steady	3	100.0		
Irregular	1	25.0	3	75.0
Minimal	1	14.3	6	85.7

When the variable which assessed the main source of support for getting and keeping jobs was cross-tabulated with the outcome measures, it was found that all of the subjects who stated that their own initiative was the major factor, and all who said that family support was most important indicated that their families were within norms on the control subscale, while 60 percent who had major difficulties and all who stated that peer support was most important indicated that their families had problems with control.

Table 41. Cross-Tabulation: Source of Support for Employment by Control

Source	Within Norms n = 9		Dysfunctional Range n = 5	
	No.	%	No.	%
Self	6	100.0		
Family	1	100. 0		
Peers			2	100.0
Major difficulties	2	40.0	3	60.0

As well, all who stated that family members or peers were most supportive, and 50 percent who attributed their success at obtaining employment to their own initiative, established their families as being within norms on the subscale for communication, while all of those who had major difficulties, indicated that family members were unable to communicate effectively with each other.

Table 42. Cross-Tabulation: Source of Support for Employment by Communication

Source	Within Norms n = 6		Dysfunctional Range n = 8	
	No.	%	No.	%
Self	3	50.0	3	50.0
Family	1	100.0		
Peers	2	100.0		
Major difficulties			5	100.0

The subjects who had major difficulties included two who had accepted long-term diagnoses, and three who had rejected treatment at outcome. Two subjects with long-term diagnoses were not included in this group as one had worked successfully for three years in a sheltered situation, while another had worked for a short period at a job secured for him by a peer. Those who had major difficulties had trouble in all areas of interaction with others.

When they were interviewed, subjects were asked what their sources of income had been for the follow-up period. Three stated that they had

supported themselves with earnings from employment and subsidies from their families, six identified social assistance as their principal source, four reported that they had lived on both social assistance and earnings from work, and one said that she had received a comfort allowance while in hospital. When this variable was cross-tabulated with the outcome measures, associations were found with the subscale for communication, as well as with the Progress Evaluation Scale average score. All of the subjects who received income from both social assistance and employment, one-third whose income came from their families and employment, and 16.7 percent who were on social assistance indicated that their families were within norms for communication, while all others identified communication patterns as an area of family weakness.

Table 43. Cross-Tabulation: Source of Income by Communication

Source	Within Norms n = 6		Dysfunctional Range n = 8	
	No.	%	No.	%
Social assistance/Jobs	4	100.0		
Family/Jobs	1	33.3	2	66.7
Social assistance	1	16.7	5	83.3
Hospital			1	100.0

A similar pattern was found with regard to community adjustment. Three-quarters of subjects who supported themselves on both welfare and

job earnings, and one-third who received income from their families and employment were in the higher range of adjustment, while all who remained on social assistance were in the lower range.

Table 44. Cross-Tabulation: Income by Community Adjustment

Source	Upper Range (3.75 and over) n = 5		Lower Range (3.74 and lower) n = 9	
	No.	%	No.	%
Social assistance/Jobs	3	75.0	1	25.0
Family/Jobs	1	33.3	2	66.7
Social assistance			6	100.0
Hospital	1	100.0		

As previously noted, the subject who remained in hospital was adjusted to institutional rather than to community life.

It is likely that the good communication patterns which the subjects who had supported themselves through social assistance and employment ascribed to their families at outcome were developed over a long term, and were supported by the subjects' abilities to negotiate a support base for themselves outside of their families. Such skills would not necessarily be as well developed in subjects who have the family as an economic support base, nor for those for whom social assistance is the main source of income.

In brief, subjects who had worked steadily were in the higher range on the Progress Evaluation Scale. All of the subjects who stated that

their own initiative or family support was the major factor that helped them to get or keep jobs indicated that their families were within norms on the control subscale. The majority of these subjects also characterized their families as being within norms for communication.

With regard to sources of income, subjects who had lived primarily on social assistance and employment earnings since discharge from the Adolescent Unit had higher scores on the Progress Evaluation Scale, and indicated that their families were within norms for communication.

(vi) Difficulties with the law

During the interview, subjects were asked to describe any difficulties with the law that they had had. Eight subjects indicated that they had not had any problems in this area. Four stated that they had had minor encounters with legal authority. One of these had had his driver's licence suspended for driving without a licence, one had been picked up by police after she ran away from home, one was under a restraining order after a fight with his father, and one had been convicted and fined for the possession of a small amount of marijuana. Two subjects had been convicted for more serious crimes. Of these, one subject had received several convictions for stealing, and had been charged but not convicted for more serious crimes, and one had been convicted for assault, shoplifting, and break-ins.

Several probable associations were found when the variable indicating degree of seriousness of encounters with the law was cross-tabulated with the outcome measures. This variable appeared to be associated with the

FAM subscales for control, values and norms, and role performance, as well as with the Satisfaction and Happiness Scale average score.

All subjects whose legal difficulties were of a minor nature and 62.5 percent of those who had no difficulties in this area depicted their families as being within norms on the control subscale, indicating that they and other family members were able to shift patterns of functioning in order to meet changing demands. All of the subjects who had had moderate problems with the law, showed that their families had difficulty maintaining a balance in issues of control.

Table 45. Cross-Tabulation: Legal Difficulties by Control

Legal Problems	Within Norms n = 9		Dysfunctional Range n = 5	
	No.	%	No.	%
None	5	62.5	3	37.5
Minor	4	100.0		
Moderate			2	100.0

All subjects who had had moderate difficulties with the law as well as all of those who had had minor difficulties indicated that their families were weak in their values and norms, compared to only 37.5 percent who had had no legal troubles.

Table 46. Cross-Tabulation: Legal Difficulties by Values and Norms

Legal Problems	Within Norms n = 5		Dysfunctional Range n = 9	
	No.	%	No.	%
None	5	62.5	3	37.5
Minor			4	100.0
Moderate			2	100.0

Furthermore, 87.5 percent of subjects who had no legal problems described their families as being within norms on the subscale for role performance, indicating that roles in their families are well integrated, and that members are able to adapt to new roles as required. Fifty percent of subjects who had moderate legal difficulties, and 75 percent who had minor difficulties, had scores which put their families in the dysfunctional range.

Table 47. Cross-Tabulation: Legal Difficulties by Role Performance

Legal Problems	Within Norms n = 9		Dysfunctional Range n = 5	
	No.	%	No.	%
None	7	87.5	1	12.5
Minor	1	25.0	3	75.0
Moderate	1	50.0	1	50.0

Finally, all of the subjects who had had minor legal problems, and one-quarter who had had no problems were in the higher range for satisfaction and happiness. All others were in the lower range.

Table 48. Cross-Tabulation: Legal Problems by Satisfaction and Happiness

Legal Problems	Higher Range (4.6 and higher) n = 6		Lower Range (4.5 and lower) n = 8	
	No.	%	No.	%
None	2	25.0	6	75.0
Minor	4	100.00		
Moderate			2	100.0

Two of the subjects who had had minor legal difficulties were functioning well without a diagnosis at outcome, while the other two had rejected diagnosis and treatment. The two subjects who had moderate difficulties had also rejected treatment. All of the subjects who had accepted a long term diagnosis, one who was functioning well without a diagnosis and three who had rejected treatment were included in the group who had had no legal problems.

It is likely that the subjects who experienced difficulties with legal authorities were in the process of acting out conflicts in other areas of their lives. The subjects who had moderate legal problems appeared to be conflicted with regard to issues of control, while those who had minor problems were more likely to be experiencing uncertainty in

defining and meeting role expectations. The families of both of these groups appear to be characterized by inconsistency in their explicit and implicit value systems.

All of the subjects who had had minor difficulties with the law stated that they were closer to peers than to either family members or treatment resource personnel. The finding that this group scored in the higher range on the Satisfaction and Happiness Scale suggests that, for this group, satisfaction is a measure of relatedness to peers, as previously implied in the section on peer relations.

In summary, subjects who had had moderate problems with the law indicated that their families had difficulty in the area of control at outcome. These subjects and those who had had minor legal problems portrayed their families as being weak in the area of values and norms, and role performance.

Subjects who had had minor difficulties were in the higher range on the Satistaction and Happiness Scales, and stated that they were closer to peers than to family members or treatment resource personnel at outcome. This finding supports previous findings that satisfaction for these subjects is a major of peer relatedness.

(vii) Quality of life

During the interview subjects were asked several questions about their use of free time, sources of enjoyment, and greatest worries since they were on the Adolescent Unit. They were also asked to indicate how satisfied they were with life right now, and to elaborate on their response, as well as to define several goals for the future.

Although they were given a range of four responses related to degree of current satisfaction with life, five subjects indicated that they were somewhat satisfied with life at the present time, while nine stated that they were somewhat dissatisfied. All of the former five subjects were among the first six best outcome subjects according to the scoring system used. They included two of the three subjects who were functioning well without a diagnosis, one who had rejected treatment, the subject who had a long term diagnosis of schizophrenia who had done so well, and the subject who had remained in hospital and who was adjusted to institutional life.

These subjects found enjoyment in peer relations, hobbies, travelling, reading, recreation, working and music. They worried about establishing themselves on their own, finding mates, having a recurrence of their emotional difficulties, and making enough money to live comfortably.

Six of the subjects who said that they were dissatisfied with life had rejected ongoing treatment and diagnostic labelling while two had accepted long term diagnoses, and one was functioning well without a diagnosis at outcome. One of these subjects expressed fear that the world would go to war, while another said that he worried most about "being able to get out there and work and have friends and lead a normal life". A third stated, "when I was younger I felt the same as other people, now I feel different because of my past". Other subjects responded: "I'm afraid to have a close relationship"; "I feel like the incredible Hulk ... do I scare ladies?"; "I can see with clarity what I want, but there are things pulling me back"; "I worry most about whether I'll make it through life without doing myself in"; and "I set myself up for failure".

Three of these subjects described their interest in the occult as a source of enjoyment, and one stated, "the only time I'm happy is when I'm partying".

When the variable which indicated the degree of satisfaction with life was cross-tabulated with the outcome measures probable associations with three of the measures were found. Eighty percent of those who were somewhat satisfied described their families as being within norms on the subscale for task accomplishment, indicating that their families were flexible and adaptable to changes in developmental tasks. Conversely, 77.8 percent of those who said that they were dissatisfied depicted their families as being weak in this area.

Table 49. Cross-Tabulation: Satisfaction by Task Accomplishment

	Within Norms n = 6		Dysfunctional Range n = 8	
	No.	%	No.	%
Somewhat satisfied	4	80.0	1	20.0
Somewhat dissatisfied	2	22.2	7	77.8

In addition, all of the subjects who were somewhat satisfied indicated that their families were within norms for control, while 55.6 of those who were somewhat dissatisfied indicated that their families had issues with control.

Table 50. Cross-Tabulation: Satisfaction by Control

	Within Norms n = 9		Dysfunctional Range n = 5	
	No.	%	No.	%
Somewhat satisfied	5	100.0		
Somewhat dissatisfied	4	44.4	5	55.6

As expected, this variable was also found to be associated with the Satisfaction and Happiness scale average score. Eighty percent of those who said that they were somewhat satisfied were in the higher range, while 77.8 percent of those who stated that they were somewhat dissatisfied were in the lower range on this scale.

Table 51. Cross-Tabulation: Satisfaction by Satisfaction and Happiness Average

	Higher Range (4.6 and higher) n = 6		Lower Range (4.5 and lower) n = 8	
	No.	%	No.	%
Somewhat satisfied	4	80.0	1	20.0
Somewhat dissatisfied	2	22.2	7	77.8

A possible association was also found between this variable and the FAM average score. Eighty percent of subjects who were somewhat satisfied had average FAM scores which were in the functional range, while 66.7

percent of those who were somewhat dissatisfied placed their families in the dysfunctional range, suggesting that satisfaction may be related to overall family functioning.

Overall satisfaction thus appeared to be related to the ability to complete developmental tasks, to stability with regard to issues of control, and possibly to overall family functioning.

E. Further Definition of Subjects According to Outcome Status, and Characteristics of Outcome

The following table depicts the outcome of the 14 subjects interviewed, by diagnostic and outcome status. As previously outlined, subjects are ranked according to their average scores on the three scales used as outcome measures. A subject who received the lowest FAM score, indicating family strength, the third highest score for Satisfaction and Happiness, and the sixth highest score on the Progress Evaluation Scale received a total score of ten, and was then ranked with other subjects to place her in terms of overall outcome.

Subjects who are described as being better outcome subjects were functioning relatively well in most areas of their lives at the time that they were interviewed. Those whose outcome is described as being marginal were functioning well in some areas and poorly in others. Those who are ascribed a poor outcome were functioning poorly in most areas.

Table 52. Overview of Outcome Status

	Subject # by Outcome Status	Sex	Diagnostic Situation at Outcome in the Subject's Perception
Better Outcome Subjects	1	M	No diagnosis. No further treatment post-discharge
	2	M	No diagnosis. Accepted treatment post-discharge
	3	F	Accepted diagnosis. Schizophrenia. Still receiving treatment
	4	M	No diagnosis. Accepted treatment post-discharge.
Marginal Outcome Subjects	5	F	Accepted diagnosis--schizoaffective--institutionalized long term
	6	F	Rejected diagnosis and treatment
	7	F	Rejected diagnosis and treatment
	8	M	Rejected diagnosis and treatment
	9	M	Rejected diagnosis and treatment.
Poorer Outcome Subjects	10	M	Accepted diagnosis--depression--still receiving treatment
	11	F	Accepted diagnosis--schizophrenia--still receiving treatment
	12	M	Rejected diagnosis and treatment
	13	F	Rejected diagnosis and treatment
	14	M	Rejected diagnosis and treatment.

According to the findings suggested, subjects who had a better outcome reported good relationships with both parents, and in particular with their fathers, at outcome and characterized overall family

functioning as being within norms on the FAM scale. These subjects also portrayed their families as being within norms on the subscale for task accomplishment. Ability to make friends with ease appeared to be associated with the subjects' depiction of their families as being within norms on the communication and control subscales. The better outcome subjects also indicated that they had one or two close friends, rather than many, and this variable related to family stability in the areas of role performance and values and norms. Subjects who acknowledged that they had received family support in attaining educational goals portrayed their families as having healthy patterns of involvement, and as being within norms for role performance. These subjects were more likely to have moved from an alternate setting back into the regular system in their pursuit of educational goals, and with regard to this variable, characterized their families as being within norms on the control subscale at outcome. Subjects who were successful in reaching employment goals described their families as being within norms for control at outcome, and indicated that family communication patterns were normal. Subjects did better at outcome when they had been supported by social assistance and employment earnings during the intervening course, another variable which appeared to be associated with normal family communication patterns at outcome. Subjects who indicated that they were generally satisfied with the quality of their lives, described their families as being within norms for task accomplishment, control, and overall family functioning.

Subjects did better on the Progress Evaluation Scale, which assessed community adjustment, when they were not the only members of their families who had been experiencing major physical or emotional

difficulties; when they were functioning well without a diagnostic label; when they were able to describe peer relationships as having improved since discharge from the Adolescent Unit; and when they had an easy time making friends. Subjects who had moved from an alternate setting back into the regular system, who had a steady pattern of employment, and who had lived on social assistance and earnings from employment were also better adjusted at the community level.

Finally, subjects who had higher scores on the Satisfaction and Happiness Scales were functioning well at outcome without ascribing a diagnosis to themselves; made friends easily and valued peer relationships; had had minor or no legal difficulties; and were generally satisfied with the quality of their lives.

On the other hand, subjects tended to have a poorer adjustment at the time of outcome when they had been the only person in their families experiencing physical or emotional difficulties and when they had problems relating to one or both parents. Subjects who had had difficulty benefitting from treatment indicated that their families were weak in the area of task accomplishment, as well as in the area of values and norms, at outcome. Subjects who remained in the alternate or in the regular school systems and those who were somewhat dissatisfied with the quality of their lives also indicated that their families had difficulty in completing developmental tasks. Subjects who portrayed their families as having difficulty in managing control issues stated that they were dissatisfied with the quality of their lives; had been in more serious trouble with the law than other subjects; tended to have problems with employment; and indicated that peer relations had deteriorated since their

hospitalization on the Adolescent Unit. Those who attributed weakness in the area of values and norms to their families had had difficulties with the law and were more likely to use drugs or alcohol on a regular basis.

The low scores of the poorer outcome subjects on the Progress Evaluation Scales and the Satisfaction and Happiness Scales reflected their difficulties in accepting treatment, making friends, and achieving success in the educational and employment arenas.

Chapter 5

DISCUSSION

A. Description of the Study Population

Subjects interviewed for this study were selected from a group of adolescents who were assessed for a period averaging from four to six weeks on the Adolescent Unit at Vancouver General Hospital between 1981 and 1983. As previously indicated, five of the subjects had had a first psychotic break prior to their admission while the remaining nine were queried to be in the process of developing a psychotic illness on the basis of some abnormality in behaviour. As expected, the subjects were found to be a heterogeneous population with considerable variance in all areas of functioning at the time of outcome. Despite this variance, however, most of the members of this group were still having significant difficulties several years after their hospitalization.

As several of the researchers cited in the literature review have noted, outcome is a multidimensional concept that involves several semi-independent processes, including social relations, employment, and the need for ongoing treatment (Health & Welfare Canada, 1985). Palmer (1981) understands psychiatric disturbance in adolescence as a reaction to severe stress coupled with unresolved crises during a crucial developmental phase. She identifies the areas of the personal, the familial, and the social as being potential sources of stress.

Garmezy (1987) emphasizes that along with the existence of stressful life conditions which promote disturbance, there are also categories of

variables which relate to protective factors. In particular, these are the personality disposition of the child, the presence of an external support system that encourages and reinforces coping efforts, and the presence of a wholesome family ecology.

As Goffman (1959) has cautioned, and others have reinforced however (Wing, 1978; Scheff, 1981; Bachrach, 1988), hospitalization for psychiatric reasons may be socially disabling in its own right, particularly for individuals who are in the process of forming their identities and who may have been having ongoing difficulties doing so.

When the study population as a whole is evaluated for its functioning at outcome, two features stand out. The first is that the subject who had the best outcome was also the only subject who had no further treatment. The second is that regardless of outcome status or diagnostic status, every other subject had major difficulties in some areas of his or her life, and in particular had difficulty in the areas of education, employment, and social relations.

According to Erikson (1982) and other developmental theorists (Maccoby, 1988), the subjects interviewed for this study who were completing developmental tasks successfully would be expected to be in the process of both developing self-reliance, and of turning from family members to peers for support. Those who were unable to make the transition would be characterized by both self-rejection and isolation.

(i) Better outcome subjects

The only subject who appeared to be successfully meeting Erikson's expectations for a healthy transition was the subject who had no further

treatment. This subject had the best functioning for employment and education, the highest scores for community adjustment, and scores which were among the best on the Satisfaction and Happiness and Family Adjustment Measure scales. Although he indicated that his family had some difficulties with affective expression and communication, this subject was able to compensate for family weaknesses by seeking positive relations with peers, and by developing a strong rapport with his boss, whom he said was "like a father". This subject also expressed his own motivation to do well, on his own terms.

Although it was clear following the interview with this subject that he had made an adjustment to normalcy, and had put the hospital experience behind him, possible reasons for this result were not evident. When the researcher screened hospital records taken at the time of assessment, it was apparent that the profile of the subject's presenting problems did qualify him for inclusion in the study. It was also discovered, however, that this young person had been placed on anabolic steroids to promote his physical development a year prior to his admission to the Adolescent Unit. He continued to receive the steroids during his hospital stay, and their use was neither questioned nor related to the problems with aggressive behaviour that he was experiencing. The researcher has consulted with clinicians who have confirmed that the use of steroids may have produced the symptoms which led to this youth's hospitalization. It is likely that this subject did not really belong in a psychiatric system, and that his parents' subsequent actions to discharge him were consistent with their ability to function effectively to protect the interests of their family members.

All of the three other subjects who were included in the group with the best outcome had extensive treatment following their discharge from Vancouver General Hospital. Two of these subjects do not carry a diagnosis at present, although they continue to interact on an informal basis with treatment resource personnel. The third is the subject with schizophrenia who was very stable when interviewed.

One of these subjects appears to have compensated for family weaknesses by his affiliation with treatment resource personnel, through his own determination to do well, and in response to an improved relationship with his parents, particularly his father, who responded to the treatment process. This subject's FAM scores are all within the normal range, showing the degree of healthy functioning which he claims currently exists with his parents. He has had difficulty establishing relationships outside of the family, however, particularly with members of the opposite sex. He also lacks motivation to go beyond his present employment skill level, and has a job in which he is socially isolated.

Although the subject who has schizophrenia is very stable in her family relations, living situation, vocational activity and interaction with peers and members of her treatment resource network, she is also socially isolated to the extent that she remains dependent on family members and treatment resources. Like others who have schizophrenia, she appears to function within a cocoon of support.

The fourth subject in this cluster has achieved some stability with family relations and peer interaction, but has had major difficulties in reaching educational goals, and in keeping jobs, although he is socially skilled enough to get jobs. This subject is also prone to use drugs

and/or alcohol on a frequent basis, and to base much of his peer interaction around the use of these substances.

(ii) Marginal outcome subjects

The group which, in comparison with other subjects, had a marginal outcome, includes the subject who has been hospitalized at Riverview through her late teens and early twenties, and four subjects who had rejected ongoing treatment and a diagnostic label, at the time that they were interviewed. Three of the latter subjects used alcohol and drugs on a frequent basis, two had histories of aggression toward others, all had difficulties with issues related to employment, and all had FAM scores which were in the dysfunctional range, reflecting ongoing conflict with family members. Despite these difficulties this group continued to show motivation in attempting to find a place in the work force, and in pursuing relationships with others.

(iii) Poorer outcome subjects

The group with the poorest outcome included two members who had accepted a long term diagnosis, one for schizophrenia and one for depression, and three who had rejected ongoing treatment. The latter three had scores in the dysfunctional range on the FAM scale, while all five subjects had major difficulties with peer relations and had minimal or no work experience.

(iv) Diagnostic issues

From a diagnostic point of view, it is interesting to note that the two subjects who developed schizophrenia had both had psychotic breaks prior to their admission to the Adolescent Unit. The assessment records do show some difference of opinion between two psychiatrists regarding one of these subjects however. One psychiatrist believed that the adolescent was probably in the process of developing schizophrenia, while another focused on family pathology, and in particular attempted to encourage distance in the mother-daughter relationship. There is also some discrepancy regarding the diagnosis of a third subject, who has been diagnosed for several years as having a schizoaffective disorder. During the course of the interview this subject discussed an extensive history of abuse which she stated she had not revealed while on the Adolescent Unit. It is this researcher's opinion that this subject may have sought refuge in a treatment system as her means of escaping abuse.

The three subjects who had had a psychotic break prior to their admission to the Adolescent Unit who did not appear to have developed a long-term schizophrenic illness were among the subjects who rejected diagnostic labelling. These subjects, in addition to all of the other subjects, continue to be at risk to develop a chronic illness, as they are still well within the age range of doing so. Indeed some of the subjects may in fact already be exhibiting the "negative" symptoms of schizophrenia. As Torrey (1984) points out, "negative" symptoms include symptoms such as apathy, social withdrawal, poverty of thoughts, blunting of emotions, lack of drive, which indicate the absence of conditions which should be present.

Although it is clear from a developmental standpoint that these subjects have had difficulty with separation and individuation issues, their diagnostic profile remains uncertain and controversial. The best predictor for the development of a psychotic illness appears to be psychosis, although only 40 percent of subjects who were psychotic during their admission to the Adolescent Unit appear to have developed schizophrenia.

Regardless of diagnostic status, however, the majority of the subjects appear to be at some risk to meet Toews' and Barnes' (1986) criteria for mental illness, in particular their description of "persons suffering from a mental or emotional disorder that is long-term and produces serious psycho-social difficulties that sharply limit their ability to interact with their environment in such a way as to sustain themselves and relate competently to others". In other words, even if these subjects do not develop a psychotic illness at some time in the future, they may enter the mental health system with another diagnosis, e.g., depression or personality disorder. As Erikson (1982) and Bayrakal (1987) have suggested, society does not look kindly on young people who do not fit in. Social pressures may thus perpetuate the alienation and isolation of some of these subjects, or may push them back into the treatment system.

Does treatment help or does it foster the creation of negative identity and reinforce stigmatization? The following discussion on findings will attempt to show that, like any system, the mental health system has the capacity to promote growth or to contribute to the social disablement of its clients. The key to success in the treatment process,

it will be argued, lies in a treatment approach which works with supportive people in the environment, as well as with the individual.

B. Discussion of Findings

(i) Family relations

The majority of the findings are descriptive of associations between the independent variables and various aspects of family functioning, according to the subjects' perspective, at the time that the interviews were conducted. The finding of greatest note was the apparent association of the quality of the relationships that the subjects had with their fathers to five out of a possible seven areas of family functioning assessed by the FAM Scale, as well as to adjustment to community life, as measured by the Progress Evaluation Scale. Those who stated that their relationships with their fathers had become positive by the time of outcome also portrayed their families as being within norms on the subscales for task accomplishment, communication, role performance, affective expression, and values and norms, and indicated that they functioned well as family units. These subjects thus suggested that positive support from their fathers was associated with their families' ability to be flexible and adaptable to changes in developmental tasks, to be clear and direct in communication patterns, to understand and integrate the roles played by each member, to foster the expression of emotion, and to be consistent with regard to internal and external value systems.

These findings provide a balance to the traditional focus of both psychiatric clinicians and family systems theorists on the mother-child relationship. Since the subjects indicated that fair relationships with

their mothers were associated with family problems with control at outcome, and that fair or poor relationships with their mothers were associated with problems with overall functioning, they implied that in general they assumed that the relationships with their mothers were positive, regardless of some of the other issues in their families. Since this assumption is not made about the father's role, however, particularly by the female subjects, the father's role in some ways appears to be a more critical one. From a treatment perspective, an acknowledgement of the importance of the father's role, and a shift in treatment intervention might not only result in a better treatment outcome, but also might relieve both treatment personnel and the mothers of young patients of the conflicts which frequently arise when enmeshment issues are the focus.

The finding that subjects who were the main people in their families having problems characterized their families as being weak in the area of control is supported by the "expressed emotion" studies (Brown, Birley, & Wing, 1971; Vaughn & Leff, 1976) which found that overinvolvement of family members was predictive of relapse. Subjects who portrayed their families as being weak in the area of control also had had greater difficulties with peer relations, and/or had tended to get into more serious trouble with the law than those who did not have problems in this area. As previously noted, the subjects who described their families as having problems with control included two who had accepted a long term diagnosis, and three who had rejected treatment. As Kanter, Lamb, and Loeper (1987) suggest, it is likely that the behaviour of the subjects promoted family attempts to control them which may then have encouraged

the behaviour of the subjects. Subjects involved in such a dynamic are likely to have had difficulties in both completing developmental tasks and in forming positive peer relationships.

(ii) Interaction with treatment resources

All of the best outcome subjects in this study described positive relations with both parents, as did three-quarters of those who had received long term treatment. The researcher's assumption that treatment personnel would contribute to an improved prognosis for outcome when family members were not supportive was not borne out by the study. What was apparent, in fact, was that subjects who had had extensive treatment were more likely to characterize their families as having value systems which were consistent with the larger culture. Two of the better outcome subjects who functioned well without a diagnosis, and the four subjects who had accepted long-term diagnoses indicated that their families were within norms for values and norms. As well, the three subjects who functioned well without a diagnosis, and two of the subjects who had accepted a long-term diagnosis depicted their families as being within norms for task accomplishment. These findings suggest that families which engage with treatment resources are likely to have or to develop values which are consistent with those of the larger culture, as well as to have or develop patterns of being able to adapt to new situations. Outcome thus appears to be associated with the interaction between the families and treatment resources personnel, rather than with the efforts of one system or the other.

In contrast, all of the subjects who continued to have difficulties but who had dropped out of the treatment system for periods of time indicated that their families were weak in the area of values and norms. The majority of these subjects also portrayed their families as having difficulties at outcome with task accomplishment. Engagement with treatment resources thus also appears to be associated with the family's ability to develop functional patterns of responding to stressful situations, such as those related to the deterioration of a family member, as well as to similarity in values between family and treatment systems. The fact that all of the subjects who had rejected ongoing treatment and had not accepted a diagnosis indicated that their families were in the dysfunctional range on the average FAM scores, suggests that their continuing problems may have aggravated, and in turn may have been affected by, long term family conflicts. These subjects and their families may also have been adversely affected by societal and cultural pressures and expectations, as suggested by Sedgewick (1981), Erickson (1982), and Bayrakal (1988).

It was not surprising to find that subjects who accepted the long-term use of medication described their families as being within norms for role perfomance, for values and norms, or for overall family functioning, since the acceptance of the use of medication is predicted by acceptance of extensive treatmnt and of a long-term diagnosis. Subjects who had a sibling or extended family member who had been diagnosed as having a mental illness also characterized their families as being within norms for values and norms. This finding suggests that a history of mental illness may relate to the ability of the family to accept social

norms regarding the need for treatment. In other words, a family which has accepted some form of mental illness may be more accepting of the need for treatment and less concerned about possible stigmatization. The acceptance of treatment may also then promote the acceptance of a diagnosis and the need for ongoing treatment. This finding is supported by the fact that the parents of all of the subjects who had accepted a long term diagnosis at outcome described family histories of mental illness at the time that the subjects were admitted to the Adolescent Unit.

It is likely that subjects who accepted a diagnostic label may have derived benefits from the treatment system at the same time that they chose a career path in which they were stigmatized by the mainstream (Goffman, 1959; Scheff, 1981), and that those who rejected treatment and a diagnostic label derived benefits from being able to survive in the mainstream without being stigmatized as being mentally ill.

This study also suggests, however, that subjects whose family value systems differ from those of the larger culture may have difficulty in forming relationships with treatment personnel, and thus may not receive or may not benefit from treatment. Although some form of family work is carried out in most treatment settings for adolescents, it may be that a greater emphasis on working with difficult families, and preventive steps to avoid labeling and stigmatization, will have to be undertaken in order to attract the families into treatment. In other words, treatment settings may have to adapt to the needs of the families, rather than vice versa, in order for treatment attempts to be more successful.

(iii) Peer relations

The assumptions made by the developmental theorists (Erikson, 1982; Maccoby, 1988) that separation from the family and the attainment of positive peer relations in adolescence are indicative of a healthy completion of developmental tasks are borne out by this study. Subjects who described their families as having healthy communication patterns and the ability to express affect indicated that they had been able to make friends with greater ease than other subjects. Satisfaction and happiness scores and community adjustment scores were also higher for those who were able to make friends, and lower for those who had difficulty in this area.

Three of the four subjects who had accepted a long term diagnosis and the poorer outcome subjects among those who had rejected treatment had the most difficulty with peer relations. It is probable that both the intrinsic impairment resulting from their deterioration, and the way that the subjects were perceived by themselves and by others affected the ability of the subjects who had a long term difficulty to make friends. Many of the subjects reported that peers treated them differently when they found out about their illness. It is also likely that the fact that several subjects went into residential or hospital treatment settings reinforced both their isolation from peers and the tendency of others to stigmatize them, as theorized by Goffman (1959) and Scheff (1981).

Another interesting finding in the area of peer relations was that subjects who had one or two close friends described their families as being within norms for role performance, while those who had no close friends or several friends appeared to come from families whose members had difficulties in understanding role expectations as well as in the area

of values and norms. This suggests that subjects who had major difficulties in making connections with peers, or who may have compensated by overvaluing them, did not know what was expected of them with regard to role development at outcome. In light of the difficulties the subjects who were closer to peers than to family members or treatment resource personnel indicated that their families had with communication, involvement with family members, and the ability to express their feelings, it is not surprising to find that they turned to drugs and alcohol to facilitate peer relationships.

(iv) Educational achievement

The school setting is of particular importance to the development of adolescents since it is the place that parental values and expectations and relations and issues with peers come together. Ability to resolve the inherent conflicts can lead to success in community adjustment, which includes achievement of a meaningful position in the work force.

The subjects who made the most successful transition in the area of education were those who went from an alternate school setting back into the regular system, following their discharge from the Adolescent Unit. These subjects characterized their families as being within norms for task accomplishment, and they had the highest scores for satisfaction and happiness, and for community adjustment. Families who encouraged their members' educational achievement were also portrayed as having strength in the area of their involvement with each other.

When the subjects were interviewed it was apparent that many of them had made heroic efforts to get an education, and that completing

educational goals was not an easy task for any of them. As previously mentioned, subjects who left and then returned to the regular system were faced with a number of obstacles, including lack of understanding from peers and teachers and the need to readjust to several settings. One subject stated, for example, that he had had to approach the Ministry of Social Services and Housing for financing so that he could stay in school, as he was not able to return home following discharge from the Maples. Others had to support their educational efforts by working.

Subjects who did receive support from teachers had higher community adjustment scores. Like treatment resource personnel, however, teachers appeared to support those whose family values were consistent with social values, and subjects who experienced teachers as being critical of their efforts indicated that their families were weak in the area of values and norms.

Although it was expected that the subjects would place some value on the involvement of peers in their attempts to complete their education, in light of developmental issues, eight of the subjects said that peer involvement was not important to them. This variable was found to be associated with problems of communication which the subjects indicated were present in their families.

(v) Achievement in employment

Although some of the subjects who did well academically as well as in the area of employment came from the more stable families, others did not. The assessment of outcome as a measure of personal competence (Bleuler, 1984; Garmezy, 1987) was particularly relevant to the area of employment

in which subjects indicated that self-motivation was the main factor which helped them to get or keep jobs. One of the higher achieving subjects in fact, characterized her family as being very dysfunctional, and had endured significant personal trauma. Although she continued to experience difficulties in interpersonal relationships and was among the marginal group at outcome, she appeared to be the brightest of the subjects and to have other personal strengths. A second subject also functioned relatively well in the labour force despite significant difficulties. This subject had not done well on the Adolescent Unit, and had received minimal treatment following. It was thus surprising to find that he was able to support himself through his work, and that he had some insight into his situation.

The area of employment is the main area in which subjects who rejected treatment were able to function more effectively than those who had accepted a long-term diagnosis. Regardless of their actual experience, five of the seven subjects who had rejected treatment were struggling to establish themselves in the work place when they were interviewed. In contrast, those who had carried a long term diagnosis did not have goals to be involved in competitive employment. These findings are consistent with those of Warner, Taylor, Powers and Hyman (1989) whose subjects demonstrated better relative functioning when they accepted the label of mental illness, but had greater self-esteem and a more internal locus of control when they rejected the label.

The initiative the subjects took to make their own way was also demonstrated by those whose main source of income was social assistance as well as income from employment. These subjects included those who did

relatively well with employment despite expectations to the contrary, as well as two of the better outcome subjects.

(vi) Involvement with the law and quality of life issues

It was surprising to find that only two of the 14 vulnerable subjects had had moderate difficultes with legal authorities. It is likely that the involvement of the mental health system, in whatever limited capacity, acts as a buffer to greater legal difficulties.

A final measure of the importance of the completion of developmental tasks to an adolescent population was the finding that personal statements of satisfaction related to the subjects' description of their families as functioning within norms in the area of task accomplishment. Subjects were also happier when they did not feel controlled by their families, indicating that success in individuation promotes satisfaction. As well, the suggestion was made, as this study has demonstrated thoughout, that the quality of family functioning is important to the development of a sense of well being.

(vii) Conclusion

The findings provide a more thorough understanding of family dynamics at outcome, from the subjects' points of view. They indicate that certain types of outcome are associated with specific types of functioning. Although subjects who had dropped out of the treatment systems described their family at outcome as being largely dysfunctional, those who had either passed through the treatment system or remained in it portrayed their families as being more functional.

The findings also provide insight into many of the issues surrounding the ability of these young subjects to complete developmental tasks. Success or failure in this area in particular appears to be associated with subscales of task accomplishment and role performance. Subjects whose families supported an affiliation with treatment resource personnel appeared to have the most success in meeting developmental goals.

In conclusion, the findings do not entirely support the hypothesis that those who came from functional families would have the best outcome, while those from dysfunctional families would do well if they received support from treatment resource personnel. What is suggested is that functional families will liaise with treatment team members as well as with teachers in providing support for their children, while young people who have greater difficulty accepting and receiving treatment will suggest that they do not have family support. Personal competence, rather than external support thus appears to be the secondary indicator of outcome. The new hypothesis which is suggested by this study is that subjects who have the best outcome, regardless of their diagnostic status, will indicate that their families are largely functional, while those who have the next best adjustment will be the subjects who depict their families as being dysfunctional but who themselves are able to compensate with a high degree of personal competence.

C. Methodological Issues

The current study has several limitations which affect its reliability and which prevent its findings from being generalized. As previously noted, the sample size is too small to allow results from cross-tabulations and chi-square analysis to be interpreted with confidence. The results must thus be understood in their context as possible findings which need to be confirmed in a larger study.

Pfeiffer (1989) has established a variety of considerations which should be taken into account in the design of follow-up studies. The current study includes many of the aspects which Pfeiffer has described as being important, but excludes others.

The respondent rate of the present study, at 60.8, is similar to that of 26.7 percent of the studies evaluated by Pfeiffer, which had respondent rates between 51 and 75 percent. This study is also similar to the majority of the adolescent studies reviewed which relied on a self-rating component as a source of data, and which used non-published questionnaires developed by the author of the study to collect information. Its use of standardized rating scales and statistical procedures are supported by Pfeiffer. The emphasis of the current study on a multidimensional and multidirectional definition of outcome, allowing for both positive and negative outcomes in a variety of dimensions, is one of its strong features, according to Pfeiffer's theoretical considerations. Unlike the large majority of studies reviewed, the current study focuses on the subjects' adjustment to the community following hospitalization, and includes indicators of role performance and social adjustment, factors which Pfeiffer describes as being important. Pfeiffer also endorses a

focus on predictor variables which have been infrequently investigated, but which are included in the present study. These are: the father's presence and involvement with the family; academic status; locus of control issues; children's attitudes toward hospitalization and treatment; and interpersonal competence.

Pfeiffer outlines several considerations which might help to strengthen the findings of the present study. For example, the inclusion of a control group which has not had a psychiatric hospitalization, and/or one of subjects who were also assessed in the Adolescent Unit but who did not have psychotic symptoms might help to put the findings of this study in a clearer perspective. Although there are distinct advantages to having subjects who have been hospitalized on a psychiatric unit followed by someone who is known to them, Pfeiffer's recommendation that interviewers be blind to the research may also have merit, as a means of promoting greater objectivity. The current findings would also be strengthened if measures had been taken at preplacement, at the time of discharge, and at follow-up, and by the use of powerful statistical techniques, as Pfeiffer recommends. It is not clear from the current study whether the patterns of family functioning which were found have existed over time, or whether there has been a marked change during the intervening course.

A further limitation of this study is that most of the variables used are qualitative in nature. There is thus some question as to their reliability when they are matched with the outcome measures, since a subjective judgment regarding their relevance is required by the researcher.

It was the intent of the researcher to strengthen findings in the current study by interviewing family members and/or treatment resources personnel in addition to the subjects, but time constraints were prohibitive. Findings with regard to family functioning may also have been improved by the use of all three Family Assessment Measure interview schedules, as well as by the completion of these scales by a parent or other family member. The use of further measures of outcome, such as a locus of control scale, or a scale which could be used to assess stigma may also have added depth to the findings. A prospective study would have allowed for the collection of information taken from hospital records directly from the subjects' families, thus increasing reliability. Finally, with a larger sample size, the researcher would want to control for the effects of extraneous variables on the discovered associations, using multivariate rather than bivariate analysis.

D. Discussion of Variables Not Associated with Outcome Measures

The group of variables which appeared in particular to have minimal or no associations with the outcome measures were those which were taken from hospital records, which pertained to information gathered at the time of assessment. A discussion of the finding that a family history of mental illness predicted conformity to social norms is included. No findings were made with regard to family histories of alcoholism or of depression, however. As well, no findings were made when the clinical staff's assessment of how dysfunctional the families were was cross-tabulated with the outcome measures. Although it was interesting that a number of parents of the subjects were nurses or counsellors, and

there was a suggestion that the subjects from these families did better on the Progress Evaluation Scale, no statistically significant associations were made.

Manderscheid (1987) and Harding's (1987) finding that diagnosis does not predict outcome was supported by the fact that there was no strong association between any of the diagnostic variables and the outcome measures. The only possible association that warrants mention is the finding that subjects who were depressed had greater difficulty with affective expression than those who had had a psychotic break, or those diagnosed with a personality disorder.

Although there was a suggestion that subjects who were either adopted or foster children had greater difficulties with control than those who were natural children, the sample size was too small to take these results seriously.

Finally, the size of the subjects' social network did not appear to predict outcome.

E. Observations

The outcomes of the subjects of this study appear to be related as much to limitations in their family and treatment systems as to their own inherent limitations. Bayrakal (1987) and Erikson (1982) have established that sociocultural factors acting on family functioning can aggravate emotional difficulties and behavioural problems in young people. Harbin (1982) and Orr (1989) have also indicated that treatment systems can compound the problems of families who are in crisis by not understanding their need to be involved in the treatment process or by becoming

competitive with them for the control of the sick member. Lefley (1990) has pointed out that it is primarily in the West that families have been excluded or treated as toxic agents, while in other countries they are considered to be integral components of the treatment process.

An analysis of hospital records revealed that all of the subjects' families were considered to be dysfunctional at the time of assessment, and the majority to have enmeshed mother-child relationships. As previously noted this type of analysis is characteristic of adolescent treatment settings (Feinstein & Miller, 1979). The focus of assessment was not on evaluating family strengths and weaknesses, but on determining how dysfunctional the family was. Regardless of this focus, however, it was recommended that only two of the families pursue family counselling post-discharge. Eight of the adolescent were referred for residential treatment at the Maples while it was suggested that five of the subjects be taken into care by the Ministry of Social Services and Housing.

In order to understand why the options appear to be both anti-family and limited, it is helpful to step back and look at the treatment system for teenagers. The Maples Residential Treatment Centre for adolescents is the longest term treatment setting available, and has been in existence for several decades, dating back to an era in which troubled youth and delinquents were considered to be synonymous. The philosophy of care which dominates both this setting and foster settings is that adolescents who are having difficulties at home should be removed from the home. In this context families are often seen to be people who have failed to do a proper job, while treatment resource personnel and foster families are held to be more competent.

As an assessment unit which makes recommendations for ongoing treatment post-discharge, the Adolescent Unit is both part of the regular system, and is affected by the limitations inherent in the system. With its medical model focus, as part of a large medical institution, the emphasis in treatment is likely to focus on the treatment of apparent pathology.

Although it is apparent both from the bias of this study, and from the theory cited that an increased emphasis on understanding family dynamics, and promoting an alliance with families is indicated, such a transition is not an easy task to accomplish. While people who are sent to institutions may be isolated from the mainstream without really addressing some of the issues which led to their deterioration, the fact remains that families which are already burdened may experience relief when a member with whose behaviour they are not coping is moved to another setting. It may in fact be easier for both treatment personnel and family members to accept the current state of affairs, which exists for the treatment of adolescents at greatest risk.

Although the Maples, the Adolescent Unit, and the Mental Health Teams currently do some work with families, the majority of workers who work from a family systems approach rather than from a diagnostic approach tend to avoid populations which have been labeled psychiatric. In order to shift the treatment model currently used in mental health settings to one which works more supportively with family systems, staff at all levels of the treatment system would have to make a paradigm shift. Staff members would thus have to be willing to make such a shift, and to undergo extensive training in family systems theory. It seems unlikely that such

a change will take place, however, since it would promote a great deal of upheaval and would be expensive to carry out.

A further emphasis which is suggested by this study is one on developing psychoeducational models for families of hospitalized adolescents. Dorothy Orr (1989) has suggested that psychoeducation is an effective tool for working with families experiencing the initial crisis when a thought-disordered member is brought to hospital. She recommends family therapy for those who have not returned to healthy functioning some months later.

It is obvious that the current system is not designed to provide the support systems necessary to make increased work with families a possibility although there has recently been much discussion of the need for families to take greater responsibility for their ill family members. In addition to increased opportunity to receive psychoeducation and family therapy, families who have deteriorating teenagers could also benefit from the availability of one to one workers, respite opportunities, and supportive school environments.

Along with the treatment and social service systems, the educational system has much to offer, as well as the need to evaluate its goals for and responses to adolescents who are in need of treatment for mental health problems. Although resources are currently limited, the start of an improved support system involves a change in attitude from seeing families as dysfunctional and causal of the adolescent's difficulties, to viewing them as people who need help to cope with the immediate crisis, but who are the best potential resource in the long run.

F. Implications for Social Work Practise

With its emphasis on a biopsychosocial understanding of human behaviour which includes a focus on personal strengths and coping abilities, social work has a leadership role to play in creating a change in attitude toward people who may have been seen as being largely dysfunctional and not appropriate for treatment. Since social work practise has traditionally involved working with families in crisis using a family systems model, social workers also have much to offer both to families who have a member experiencing a psychiatric deterioration, as well as to the member who is in need of increased family support. A further strength which social workers bring to the mental health field is their understanding and ability in the area of creating supportive networks, and in liaising with other organizations involved in an individual's care. Social work concepts and treatment paradigms thus apply to all levels of care of adolescents, young adults, and their families who have sought help in the mental health system.

Further areas in which social workers have expertise are those of advocacy, on the personal and organizational levels, and policy making. With their appreciation of social policy, as well as treatment issues, social workers are in a key position to take the concerns from the micro level of operation to the macro.

With regard to issues raised in the current study, a social work role is indicated in generating awareness of the role of various family dynamics in the outcome of the subjects, in generating a change in attitude among professionals who continue to devalue families, in working to improve programs and treatment opportunities for families who have

teenagers experiencing emotional difficulties, and in working for policy changes to make improved resources available.

G. Conclusions

The purpose of the study was to evaluate the outcome of a group of adolescents who were psychiatrically assessed at Vancouver General Hospital, several years after the assessment, in order to determine which factors had promoted a positive outcome, and which a negative one. A secondary purpose was to see which of the subjects, all of whom had been queried to be in the process of developing a chronic mental illness, had actually developed schizophrenia or another long-term illness.

Because of its descriptive and exploratory nature, the study raised as many questions as it sought to answer. As a result of limitations in design, including the small sample size and retrospective focus, further studies will have to be undertaken to confirm the associations which were discovered.

The best outcome group included three subjects who were functioning well without a diagnosis and one who had accepted a long-term diagnosis for schizophrenia. The marginal group included four who had rejected ongoing treatment and diagnostic labeling, and one with a long-term diagnosis, while the poor outcome group consisted of three members who had rejected treatment and two who had accepted long-term diagnoses. Most of the subjects continued to have major difficulties in some areas of their lives, and these increased in relation to their outcome status.

Although all of the subjects remain at risk to develop a long-term chronic illness, only two subjects appeared to have developed

schizophrenia in the intervening course, while one was diagnosed with a schizoaffective disorder, and one with long standing depression. Three subjects who had a psychotic break prior to their admission to the Adolescent Unit had not had a recurrence post-discharge.

The subjects who were interviewed for this study are still in the process of completing their developmental tasks and of deciding their directions for the future. Any number of events could intervene in the next several years to change the course of their lives. It is thus recommended that an effort be made to retain contact with them so that ongoing evaluation of their progress can be made. This research is an initial step in determining their outcome. It will take many years, however, before conclusive statements can be made.

The findings of this study also confirm the need for treatment resource personnel to recognize family members as people who are not only in need of support, but who are also sources of strength who have much to offer as allies in the treatment process. Social workers have leadership roles to play in generating improved treatment options, such as family therapy and workshops in psychoeducation, and in influencing a change in current attitudes which hold families responsible for the fragility of their members.

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LIST OF APPENDICES

Interview Schedule

Date of Interview: .....

I.D. Number .....

As you know, I am interviewing a number of people who were seen on the Adolescent Unit at V.G.H. several years ago to see how they are doing now. I would like to ask you some questions about what has been going on in your life since you left the Adolescent Unit.

I. Education

First of all, I would like to know how things went for you at school.

1.1. Did you return to school after you were discharged from the hospital?
Yes (go to 1.3) No

1.2. If no, why not?

.....
.....
.....
.....

1.3. Are you currently in school or taking courses?
Yes No Yes No

1.4. (If no to both): Why did you stop going to school?
.....
.....
.....
.....

1.5. How far have you gone with your education?

Grade level .....

Vocational training (please specify training and year completed)

.....

Community College (please specify training and year completed)

.....

University level (please specify training and year completed)

.....

1.6. Looking back over the past several years, what do you think helped you most to go as far as you have in school?

.....

.....

.....

.....

1.7. Were there people that you feel were particularly helpful in assisting you to go as far as you did in school? Yes No (go to 1.9)

1.8. If yes, who were these people and how did they help you?

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1.9. If no, why do you feel this way?

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1.10. Were there people who advised you to drop out of school because you had been on the Adolescent Unit or because you were having problems later on? Yes No (Go to 1.12)

1.11. If yes, who were these people and what advice did they give you?

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1.12. What do you think have been the biggest problems that you have experienced since you were on the Adolescent Unit in your attempt to get an education?

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.....

II. Employment History

I would now like to ask you a few questions about any jobs that you have held.

2.1. Are you working now?

Yes, full-time

Yes, part-time

Unemployed but looking for work

Student

Sheltered workshop

Manpower training program

Not working, but on GAIN or HPIA

Other (please specify) .....

2.2. (If working) What job do you do? .....

2.3. Have you worked in the past? Yes (go to 2.3) No (go to 2.4)

2.4. What was the first job that you had? After that, what jobs have you held?

No.	Job held	Time period (approximate)
1.	.....	.....
2.	.....	.....
3.	.....	.....
4.	.....	.....
5.	.....	.....

2.5. What would you say has helped you to get or keep jobs?

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.....

2.6. In particular, are there people who helped you in this area?

Yes No (go to 2.8)

2.7. If yes, who are these people, and how did they help you?

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2.8. What kinds of problems have you had in getting a job?

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2.9. What kinds of problems have you had in keeping a job?

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.....

2.10. In particular, have there been people who you feel made it difficult for you when you tried to either get a job or keep a job?

Yes No (Go to 2.12)

2.11. If yes, who were these people and how do you feel they made it difficult for you you to get or keep a job(s)?

.....

.....

.....

.....

.....

2.12. Can you tell me your source of income at present?

Earnings from your job
Subsidies from your family
Unemployment insurance
Student loan
Income assistance: employable status
(if known) unemployable status
HPIA
Disability pension (other than HPIA)
Worker's Compensation
Other (specify) .....

2.13. How has your source of income changed since you left the Adolescent Unit?

.....
.....
.....
.....

2.14. What problems, if any, have you had in making ends meet?

.....
.....
.....
.....

III. Residential Situation

Let's talk now about where you have been living since we saw you at V.G.H.?

3.1. What type of place are you now living in?

Family home (have never left home)
Family home (have left home but returned)
Apartment
Rooming house
Supervised boarding home
Hotel
Emergency shelter
Other (specify) .....

3.2. (Do not ask if subject has never left home)
How long ago did you leave home? .....

3.3. After you left home, or if you left home and are now back with your family, where did you live first? .....
second? ..... next? .....

Number	Type	City	Shared/not shared and by whom if applicable	Duration
1.				
2.				
3.				
4.				
5.				

IV. History of Ongoing Treatment

Please tell me about any hospitalizations that you have had for psychiatric reasons since you were on the Adolescent Unit.

4.1. Have you been hospitalized on a psychiatric ward, or have you lived in a treatment place (such as the Maples) since you left the Adolescent Unit? Yes No (Go to 4.3)

4.2. After V.G.H. when did you next stay in a hospital or other treatment place? and after that . . .?

Number	Hospital/setting	Duration	Can you tell me briefly what diagnosis the doctor gave you or what the problem was that led to you going there?
1.			
2.			
3.			
4.			
5.			

4.3. Have you received treatment at a Psychiatric Outpatient Department at a hospital, or a Community Mental Health Team since you were on the Adolescent Unit? Yes No

4.4. Please tell me something about this contact.

Number	Team or OPD	Duration	Can you tell me briefly what diagnosis the doctor gave you or what the problem was that led to you going there?
1.			
2.			
3.			
4.			
5.			

4.5. Have you received treatment since you left the Adolescent Unit from anyone whose office is not in a hospital or Mental Health Team?
Yes No

4.6. Who did you go to first? . . . after that . . . Anyone else?

Number	Profession	Duration	Can you tell me what the problem was that led to you going there, or what diagnosis the doctor gave you?
1.			
2.			
3.			
4.			

4.7. In the course of your treatment, were there any people that you feel were were particularly helpful to you, or with whom you formed close contacts? Yes No (Go to 4.9)

4.8. If yes, who were these people, how did they help you, and how long did you have contact with them for?

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4.9. Were there any treatment people who you feel made life particularly difficult for you? Yes No (Go to 4.11)

4.10. Who were these people, what kind of problems did you have with them?

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.....

4.11. Do you still see any of the treatment people who helped you in the past?
Yes No

4.12. If yes, who are they, how often do you see them, and what is the nature of your contact with them?

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4.13. Are there any treatment people who helped you in the past that you would still like to be seeing for counselling? Yes No

4.14. If yes, who are these people and how do you feel they could help you now? .....

.....

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.....

4.15. After you were on the Adolescent Unit, did you take any medications for nervous or emotional problems or to help you improve your thinking?
Yes No (Go to 5.1)

4.16. Please tell me what you remember about the medications you received, e.g., what they were, how long you took them for.

.....

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4.17. (If subject remembers specific names of medications, ask whether each medication named was not at all helpful, somewhat helpful, helpful, or very helpful.)

Medication indicate name if subject remembers	Duration of use	How helpful
1.		
2.		
3.		
4.		
5.		

4.18. Please tell me any problems that you have had with taking medications.

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V. Experience on the Adolescent Unit

I would now like to ask you a few questions about your experience on the Adolescent Unit.

5.1. What were the most helpful things about your stay on the Unit?

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5.2. the least helpful?

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5.3. Is there anything else that you want to tell me about how your experience on the Unit affected you?

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5.4. Please tell me what you remember about any recommendations we made when you were discharged.

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5.5. How useful were these recommendations? Please tell me what you did with them.

.....

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5.6. More specifically, we recommended the following (to be taken from discharge summary).

What happened afterward with regard to each one, as far as you can remember.

1. .....

.....

2. .....

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3. .....

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4. .....

.....

VI. Family and Peer Relations

I would now like to ask you a few questions about your family, including any relatives who are close to you, and about your friends.

6.1. First of all, please tell me who is included in your family. I would like to know the approximate age of each person named, how often you see each one or talk to each on the phone, and where each person lives. (If family size is large, limit the question to the six most important relatives.)

Number	Relationship to respondent	Age of sibs	Frequency of contact	Frequency of phone contact	Where they live
1.					
2.					
3.					
4.					
5.					
6.					

6.2. Now I would like to ask you how your relationship with each of these people is at present, and how this has changed since you were on the Adolescent Unit.

Number	Rating at present (poor, fair, good, very good)	How this has changed over the past 5 years
1.		
2.		

Number	Rating at present (poor, fair, good, very good)	How this has changed over the past 5 years
3.		
4.		

6.3. What would you say the main problems in your family have been since you were on the Adolescent Unit?

.....

.....

6.4. More specifically, has any family member died, remarried, or divorced, became seriously ill, or had serious nervous or emotional problems during this time?

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.....

6.5. What are the main problems in your family now?

.....

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6.6 How do you think you have been affected by problems in your family?

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6.7. What are the most helpful things that people in your family do for you?

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6.8. the least helpful?

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6.9. I would like to ask you some questions about your friends. By friends I mean people that you spend time with, talk to on the phone regularly, and confide in about personal things. An acquaintance would be someone that you know and see on and off, but is not a person that you have a very close relationship with.

Do you have one or more people that you consider to be a best friend or best friends? Yes No (Go to 6.13)

6.10. How many people fit this category? .....

6.11. How long have you felt close to this person? (these people?)
.....

6.12. How would you say your best friend(s) help you the most?
.....
.....
.....
.....
.....

6.13. With regard to people of approximately your own age, would you say that you have:

many close friends — one or two close friends
a few close friends — no close friends

6.14. How easy or difficult is it for you to make friends?

very difficult — fairly easy
difficult — easy

6.15. How easy is it for you to make male friends?

very difficult — fairly easy
difficult — very easy

6.16. Female friends?

very difficult — fairly easy
difficult — very easy

6.17. Approximately how many people would you say that you have close relationships with?

family members — treatment or social service workers
friends your age — Total

6.18. Have there been any major changes in how you get along with people since you were on the Adolescent Unit? Yes No (go to 6.)

6.19. If yes, please describe these changes.

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.....

6.20. How have your friends been most helpful since you were at V.G.H.?

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6.21. How have your friends been the least helpful since you were.at V.G.H.?

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.....

6.22. Overall, would you say that your closest relationships are with family members treatment or Social Service workers or friends your own age ?

VII. I would like to know about your use of drugs such as marihuana, cocaine, or LSD, or whether you have used other drugs which are usually prescribed by a doctor but were not prescribed for you. As you know, anything you tell me will be kept confidential.

7.1. Would you please tell me about any drugs you have used to get high since you left the Adolescent Unit.

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.....
.....

7.2. Would you please tell me what your use of alcohol has been like since you left V.G.H.

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.....
.....
.....

7.3. In your opinion, have you had a problem with drugs since you were at V.G.H.? Yes No

7.4. With alcohol? Yes No

VIII. Legal Problems

8.1. I would like to know a little about any problems with the law, or with the police you might have had. Have you had any problems in this area?
Yes No

8.2. What was the nature of these difficulties?

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.....

IX. Quality of Life

9.1. What would you say have been the biggest worries in your life since you left the Adolescent Unit? How have these changed?

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.....

9.2. What are your greatest worries at present?

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9.3. What have been the greatest sources of enjoyment in your life since you were on the Adolescent Unit?

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9.4. What do you enjoy most at present?

.....

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9.5. How have you spent most of your free time since you were in the hospital? Has this changed very much?

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9.6. How satisfied are you with your life right now?

Very satisfied — Somewhat dissatisfied

Somewhat satisfied — Very dissatisfied

9.7. Why do you say this?

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.....

9.8. What are your goals for the future?

.....

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.....

.....

X. Before we end, I would like to ask you a few general questions about yourself.

10.1. Marital status:

Single	Divorced or separated
Married	Widow(er)
Common-law	

10.2. Where were you born? .....

Where was your mother born? .....

Where was your father born? .....

10.3. To what cultural group would you say you belong? .....

10.4. What is your mother's present occupation? .....

your father's? .....

10.5. In your family are you
an adopted child
a foster child
or a real child of your parents

* * * * *

Before we finish, I would like you to take a few minutes to fill out three short questionnaires. The first will give me a good idea about how things are going for you in your family, and the others about how you are doing in general.

Comment by researcher: (including mini mental status composed of the researchers' impression of the subject's state of mind during the interview)

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Family Assessment Measure

SELF-RATING SCALE

Directions

On the following pages you will find 42 statements about how you are functioning in the family. Please read each statement carefully and decide how well the statement describes you. Then, make your response beside the statement number on the separate answer sheet.

If you STRONGLY AGREE with the statement then circle the letter "a" beside the item number; if you AGREE with the statement then circle the letter "b".

If you DISAGREE with the statement then circle the letter "c"; if you STRONGLY DISAGREE with the statement then circle the letter "d".

Please circle only one letter (response) for each statement. Answer every statement, even if you are not completely sure of your answer.

Please do not write on this page.
Circle your response on the answer sheet.

1. My family and I usually see our problems the same way.
2. My family expects too much of me.
3. My family knows what I mean when I say something.
4. When I'm upset, my family knows what's bothering me.
5. My family doesn't care about me.
6. When someone in the family makes a mistake, I don't make a big deal of it.
7. I argue a lot with my family about the importance of religion.
8. When my family has a problem, I have to solve it..
9. I do my share of duties in the family.
10. I often don't understand what other family members are saying.
11. If someone in the family has upset me, I keep it to myself.
12. I stay out of other family members' business.
13. I get angry when others in the family don't do what I want.
14. I think education is much more important then my family does.
15. I have trouble accepting someone else's answer to a family problem.
16. What I expect of the rest of the family is fair.
17. If I'm upset with another family member, I let someone else tell them about it.
18. When I'm upset, I get over it quickly.
19. My family doesn't let me be myself.
20. My family knows what to expect from me.
21. My family and I have the same views about what is right and wrong.
22. I keep on trying when things don't work out in the family.
23. I am tired of being blamed for family problems.

Please do not write on this page.
Circle your response on the answer sheet.

24. Often I don't say what I would like to because I can't find the words.
25. I am able to let others in the family know how I really feel.
26. I really care about my family.
27. I'm not as responsible as I should be in the family.
28. My family and I have the same views about being successful.
29. When problems come up in my family, I let other people solve them.
30. My family complains that I always try to be the centre of attention.
31. I'm available when others want to talk to me.
32. I take it out on my family when I'm upset.
33. I know I can count on the rest of my family.
34. I don't need to be reminded what I have to do in the family.
35. I argue with my family about how to spend my spare time.
36. My family can depend on me in a crisis.
37. I never argue about who should do what in our family.
38. I listen to what other family members have to say, even when I disagree.
39. When I'm with my family, I get too upset too easily.
40. I worry too much about the rest of my family.
41. I always get my way in our family.
42. My family leaves it to me to decide what's right and wrong.

FAM SELF-RATING SCALE

Late ______________________________ Age ______ years

Name ______________________________ Sex: M F

Note: This instrument is still under development and may not be used without written permission from the authors.

1.	0 1 2 3	8.	3 2 1 0	15.	3 2 1 0	22.	0 1 2 3	29.	3 2 1 0	36.	0 1 2 3		TA
2.	3 2 1 0	9.	0 1 2 3	16.	0 1 2 3	23.	3 2 1 0	30.	3 2 1 0	37.	0 1 2 3		RP
3.	0 1 2 3	10.	3 2 1 0	17.	3 2 1 0	24.	3 2 1 0	31.	0 1 2 3	38.	0 1 2 3		COM
4.	0 1 2 3	11.	3 2 1 0	18.	0 1 2 3	25.	0 1 2 3	32.	3 2 1 0	39.	3 2 1 0		AE
5.	3 2 1 0	12.	0 1 2 3	19.	3 2 1 0	26.	0 1 2 3	33.	0 1 2 3	40.	3 2 1 0		INV
6.	0 1 2 3	13.	3 2 1 0	20.	0 1 2 3	27.	3 2 1 0	34.	0 1 2 3	41.	3 2 1 0		C
7.	3 2 1 0	14.	3 2 1 0	21.	0 1 2 3	28.	0 1 2 3	35.	3 2 1 0	42.	0 1 2 3		VN

Satisfaction and Happiness

Below are some words and phrases that people use to identify various features of their lives. Each feature title has a scale beside it that runs from "Terrible" to "Delightful" in seven steps. In general we match numbers to words such as the following:

1	2	3	4	5	6	7
Terrible	Very Dissatisfying	Dissatisfying	Mixed	Satisfying	Very Satisfying	Delightful

Please check the number on the scale beside each feature that comes closest to describing how you feel about that particular aspect of your life these days.

1	2	3	4	5	6	7	HEALTH
1	2	3	4	5	6	7	FINANCIAL SECURITY
1	2	3	4	5	6	7	FAMILY LIFE
1	2	3	4	5	6	7	FRIENDSHIP
1	2	3	4	5	6	7	HOUSING
1	2	3	4	5	6	7	JOB
1	2	3	4	5	6	7	FREE TIME ACTIVITY
1	2	3	4	5	6	7	EDUCATION
1	2	3	4	5	6	7	SELF-ESTEEM
1	2	3	4	5	6	7	AREA YOU LIVE IN
1	2	3	4	5	6	7	ABILITY TO GET AROUND
1	2	3	4	5	6	7	SECURITY FROM CRIME
1	2	3	4	5	6	7	HOW DO YOU FEEL ABOUT YOUR LIFE AS A WHOLE?

Some people have certain goals or aspirations for various aspects of their lives. They aim for a particular sort of home, income, family lifestyle, and so on. Compared to your own aims or goals, for each of the features below, would you say that your life measures up perfectly now, fairly well, about half as well, fairly poorly, or just not at all.

Please check the percentage that best describes how closely your life now seems to approach your own goals.

Not at all	Fairly poorly	Half as well as your goal		Fairly well		Matches your goal	No opinion	
0%	20%	30%	50%	70%	80%	100%		
1	2	3	4	5	6	7	8	
1	2	3	4	5	6	7	8	HEALTH
1	2	3	4	5	6	7	8	FINANCIAL SECURITY
1	2	3	4	5	6	7	8	FAMILY LIFE
1	2	3	4	5	6	7	8	FRIENDSHIP
1	2	3	4	5	6	7	8	HOUSING
1	2	3	4	5	6	7	8	JOB
1	2	3	4	5	6	7	8	FREE TIME ACTIVITY
1	2	3	4	5	6	7	8	EDUCATION
1	2	3	4	5	6	7	8	SELF-ESTEEM
1	2	3	4	5	6	7	8	AREA YOU LIVE IN
1	2	3	4	5	6	7	8	ABILITY TO GET AROUND
1	2	3	4	5	6	7	8	SECURITY FROM CRIME

Now considering your life as a whole, how does it measure up to your various aspirations or goals?

1 2 3 4 5 6 7 8

So far, we have asked you to rate several features of your life itself, and in relation to your goals. Compared to average people of your age, for each of the features listed below, would you say that your life is a perfect fit (average), a bit better or worse, or far better or worse. Please check the number on the scale that comes closest to comparing your life to the average.

Far below average	Worse than average		Average		Better than average		Far above average	No opinion
1	2	3	4	5	6	7	8	
1	2	3	4	5	6	7	8	HEALTH
1	2	3	4	5	6	7	8	FINANCIAL SECURITY
1	2	3	4	5	6	7	8	FAMILY LIFE
1	2	3	4	5	6	7	8	FRIENDSHIP
1	2	3	4	5	6	7	8	HOUSING
1	2	3	4	5	6	7	8	JOB
1	2	3	4	5	67	7	8	FREE TIME ACTIVITY
1	2	3	4	5	6	7	8	EDUCATION
1	2	3	4	5	6	7	8	SELF-ESTEEM
1	2	3	4	5	6	7	8	AREA YOU LIVE IN
1	2	3	4	5	6	7	8	ABILITY TO GET AROUND
1	2	3	4	5	6	7	8	SECURITY FROM CRIME

Now, considering your life as a whole, how does it measure up to the average for people your age?

1 2 3 4 5 6 7 8

* * * * *

Our final request is to have you compare your life now to your all time high. Compared to your own previous best experience, for each of the features listed below, would you say that your life now is far below the best it has been, worse than the best, matches the best, is better than your previous best, or far above the best it has ever been before. Please check the number on the scale that comes closest to comparing your life to your previous best.

Far below the best	Worse than best	Matches the best	Better than best	Far above the best	No opinion
1	2 3	4	5 6	7	8

1	2	3	4	5	6	7	8	HEALTH
1	2	3	4	5	6	7	8	FINANCIAL SECURITY
1	2	3	4	5	6	7	8	FAMILY LIFE
1	2	3	4	5	6	7	8	FRIENDSHIP
1	2	3	4	5	6	7	8	HOUSING
1	2	3	4	5	6	7	8	JOB
1	2	3	45	5	6	7	8	FREE TIME ACTIVITY
1	2	3	4	5	6	7	8	EDUCATION
1	2	3	4	5	6	7	8	SELF-ESTEEM
1	2	3	4	5	6	7	8	AREA YOU LIVE IN
1	2	3	4	5	6	7	8	ABILITY TO GET AROUND
1	2	3	4	5	6	7	8	SECURITY FROM CRIME

Now, considering your life as a whole, how does it measure up to the best in your previous experience?

1 2 3 4 5 6 7 8

* * * * *

Finally, considering your life as a whole, would you describe it as very unhappy, unhappy, an even mixture of unhappiness and happiness, happy, or very happy?

Very unhappy	Unhappy	Mixed	Happy	Very happy	No opinion
1	2 3	4	5 6	7	8

Screening ____
Initial ____
Reeval. No. ____
Closing ____

Client ___CR TD DX UA OT
M/F/O--Sig. Other___CR TD DX UA OT
Therapist ___

PROGRESS EVALUATION SCALES
(ADULT FORM)

INSTRUCTIONS - 1
Please circle one statement in each column that describes best how you were in the last two weeks.

Date _____

Name _____ Case # _____

FAMILY INTERACTION	OCCUPATION (SCHOOL, JOB OR HOMEMAKING)	GETTING ALONG WITH OTHERS	FEELINGS AND MOOD	USE OF FREE TIME	PROBLEMS	ATTITUDE TOWARD SELF
Often must have help with basic needs (e.g., feeding, dressing, toilet).	Does not hold job, or care for home, or go to school.	Always fighting or destructive; or always alone.	Almost always feels nervous, or depressed, or angry and bitter, or no emotions at all.	Almost no recreational activities or hobbies.	Severe problems most of the time.	Negative attitude toward self most of the time.
Takes care of own basic needs but must have help with everyday plans and activities.	Seldom holds job, or attends classes, or cares for home.	Seldom able to get along with others without quarreling or being destructive; or is often alone.	Often feels nervous, or depressed, or angry and bitter, or hardly shows any emotion for weeks at a time.	Only occasional recreational activities, or repeats the same activity over and over again.	Severe problems some of the time or moderate problems continuously.	Negative attitude toward self much of time.
Makes own plans but without considering the needs of other family members.	Sometime holds job, or attends some classes, or does limited housework.	Sometimes quarreling, but seldom destructive; difficulties in making friends.	Frequently in a good mood but occasionally feels nervous, or depressed, or angry for days at a time.	Participates in some recreational activities or hobbies.	Moderate problems most of time, or mild problems almost continuously.	Almost equal in positive and negative attitude toward self.
Tries to consider everyone's needs but somehow decisions and actions do not work well for everybody in the family.	Holds regular job, or classes, or does housework (or some combination of these), but with difficulty.	Gets along with others most of the time; has occasional friends.	Usually in a good mood, but occasionally feels nervous, or unhappy, or angry all day.	Often participates in recreational activities and hobbies.	Occasional moderate problems.	Positive attitude toward self much of the time.
Usually plans and acts so that own needs as well as needs of others in the family are considered.	Holds regular job, or attends classes, or does housework (or some combination of these) with little or no difficulty.	Gets along with others most of the time; has regular close friends.	In a good mood most of the time, and usually able to be as happy, or sad, or angry as the situation calls for.	Participates in, as well as creates, variety of own recreational activities and hobbies for self and others.	Occasional mild problems.	Positive attitude toward self most of the time.

Comments: _____

Rev. 4/78 SC-1104

Appendix 8

Procedure for Data Analysis

The code book outlines the variables and variable categories which were used in this study. The first two variables, found in the first four columns on the Fortran sheet, list the subjects by number and by line on the Fortran sheets. Variables 3 through 45 are the independent variables, and variables 46 through 69 the dependent variables. SPSSX:3 was used to analyse the data.

The Fortran sheet which follows the code book provides an overview of the responses of each subject according to the category code used. This information was used in the data analysis.

CODE BOOK

Variable No.	Variable Name	Data in Column	Category Codes
1	CASE ID	1-2	
2	RECORDS ID	3-4	
3	SEX	5	1 = Male 2 = Female
4	AGE	6-7	
5	EDUC 1	8-9	Years of education
6	EDUC 2	10	1 = lacked motivation to complete education, illness a factor 2 = self-motivation prime factor to continue 3 = external encouragement prime factor to continue
7	EDUC 3	11	1 = parents encouraged education 2 = parents criticized educational goals 3 = parents did not play major role
8	EDUC 4	12	1 = peers supported educational 2 = peers were a negative influence 3 = peers did not play a major role

9	EDUC 5	13	1 = teachers or counsellors supported educational goals 2 = teachers encouraged subject to drop out of the regular system 3 = teachers did not play a major role
10	EDUC 6	14	1 = attended alternate school post d/c 2 = remained in the regular school system 3 = attended alternate + regular schools 4 = dropped out of school
11	EMP 1	15	1 = has worked at a job for a year or more, or has been attending school full time and has frequently worked in the summer 2 = has worked at several jobs for a short time but has had difficulty keeping jobs 3 = has worked minimally or not at all
12	EMP 2	16	1 = self-motivation has been the main factor in securing and keeping employment 2 = family support has been the main factor in securing and keeping employment 3 = peer support has been the main factor in securing and keeping employment

			4 = has major difficulties in this area
13	RES	17	1 = has continued to live at home while working or going to school 2 = inconsistent pattern, moving from place to place 3 = has lived in a treatment setting for most of the time 4 = has lived independently in a stable situation for most of the time.
14	INCOME	18	1 = earnings from job/subsidy from family 2 = primarily social assistance 3 = earnings from job/social assistance
15	TREAT 1		1 = has had no further treatment 2 = has had minimal treatment 3 = has had moderate treatment (inc Maples) 4 = has had extensive, ongoing treatment
16	TREAT 2	20	1 = most treatment has been with a private practitioner 2 = most treatment has been at an OPD or Mental Health Team

			3 = most treatment was at the Maples and/or other residential settings
			4 = has been in hospital (more than 6 months)
			5 = no further treatment
17	TREAT 3	21	1 = has been on medications for long periods since d/c
			2 = has used medication intermittently
			3 = has not been on medication since d/c
18	TREAT 4	22	1 = is closest to treatment people
			2 = is closest to family members
			3 = is closest to peers
19	TREAT 5	23	1 = is aware of diagnosis for a psychiatric illness
			2 = is not sure re current diagnosis
			3 = has no current diagnosis
20	FAM 1	24	1 = relations have been gradually improving with the family since discharge
			2 = relationship is about the same as it has always been
			3 = relationship with the family has deteriorated

21	FAM 2	25	1 = family has had major problems 2 = family has had moderate problems 3 = family has had minimal problems
22	FAM 3	26	1 = subject is the main person in the family who has problems 2 = another sibling is having major difficulties 3 = one or both parents is having major difficulties 4 = every family members is having difficulties
23	FAM 4	27	1 = sibling relations are good 2 = sibling relations are fair 3 = sibling relations are poor 4 = subject is the only child
24	FAM 5	28	1 = relations with mother are good 2 = relations with mother are fair 3 = relations with mother are poor
25	FAM 6	29	1 = relations with father are good 2 = relations with father are fair 3 = relations with father are poor

26	PEERS 1	30	1 = has 3 or more close friends 2 = has 1 or 2 close friends 3 = has no close friends
27	PEERS 2	31	1 = has a lot of trouble making friends 2 = makes friends with moderate difficulty 3 = makes friends easily
28	PEERS 3	32	1 = in general gets along better with people since discharge 2 = gets along about the same 3 = relations have deteriorated
29	SOCNET	33-34	social network size: 1 = 1 to 5 2 = over 5
30	DRUGS	35	1 = has tried a number of drugs and uses some one or more times a week 2 = has experimented, uses drugs occasionally 3 = does not use drugs
31	ALC	36	1 = drinks one or more times a week 2 = drinks occasionally 3 = does not drink

32	LEGAL	37	1 = has had moderate difficulties with the law 2 = has had minor difficulties 3 = has had no legal difficulties
33	QUAL 1	38	1 = has concrete goals for the future 2 = has general goals for the future 3 = has no future goals; will take what comes
34	QUAL 2	39	1 = is very satisfied with life right now 2 = somewhat satisfied 3 = somewhat dissatisfied 4 = very dissatisfied
35	CHILD	40	1 = adopted 2 = foster 3 = natural
36	FAM HX 1	41	1 = at least one parent has a history of alcoholism 2 = alcoholism reported in extended family 3 = no alcoholism reported
37	FAM HX 2	42	1 = one parent has a history of mental illness 2 = mental illness in the extended family

			3 = sibling has mental illness 4 = no mental illness reported 8 = missing value
38	FAM HX 3	43	1 = one parent has had serious medical problems 2 = sibling has had serious medical problems 3 = no serious medical problems in the immediate family 8 = missing value
39	FAM HX 4	44	1 = Mother or Father trained as a nurse or social worker 2 = neither parent trained as a nurse or social worker
40	FAM HX 5	45	1 = family clearly dysfunctional 2 = family not clearly dysfunctional but is having problems 3 = family not dysfunctional
41	FAM HX 6	46	1 = at least one parent depressed 2 = depression in extended family 3 = no depression reported 8 = missing value
42	PRES 1	47	1 = clearly psychotic on admission 2 = query of psychosis only

43	PRES 2	48	1 = history of aggression and conduct disturbance 2 = history of social withdrawal/depression 3 = psychotic break
44	PRIMDIAG	49	1 = psychotic mental illness 2 = personality, developmental, or behaviour disorder 3 = depression
45	MSSH	50	1 = ward 2 = non ward
46	SELFTA	51-52	FAM scale - task accomplishment
47	SELFRP	53-54	role performance
48	SELFCOM	55-56	communication
49	SELFAE	57-58	affective expression
50	SELFINV	59-60	affective involvement
51	SELFCO	61-62	control
52	SELFVN	63-64	values and norms
53	SELFAV	65-69	FAM overall rating
54	SH 1	70-73	Satisfaction and happiness scale - your life these days
55	SH 2	74-77	your general aspirations and goals

56	CASE ID	1-2	
57	RECORDS ID	3-4	
58	SH 3	5-8	compared to people your own age
59	SH 4	9-12	compared to the best in your previous experience
60	SH 5	13-16	average of global items
61	SHAV	17-20	average for all subscales
62	PES 1	21	Progress evaluation scale -family interaction
63	PES 2	22	occupation
64	PES 3	23	getting along with others
65	PES 4	24	feelings and mood
66	PES 5	25	use of free time
67	PES 6	26	problems
68	PES 7	27	attitude toward self
69	PESAV	28-31	average score

UBC Computing Centre

Programmer. ADOLESCENT Follow-up STUDY **FORTRAN CODING FORM** Date _____ Page ___ of _____

C	STATEMENT NO.	CONT	FORTRAN STATEMENT →	IDENTIFICATION
0	0 1	0	1 2 0 1 2 3 1 3 1 3 1 1 1 1 1 5 3 3 3 1 2 2 2 1 1 1 3 1 0 5 2 1 2 1 2 8 1 4 3 1 2 3 2 1 3 2 5 6 4 9 6 2 6 0 5 2 3 3 6 0 5 3 . 1 4 4 . 9 2 5 . 0 8	
0	1 0 2 5		. 4 2 5 . 5 0 5 . 2 0 5 . 2 2 5 5 5 4 4 5 4 4 . 5 7 2 2 1 1 2 2 2 2	
0	2 0 1 2		2 1 1 2 3 2 1 3 3 2 1 1 2 3 3 2 3 2 1 2 1 2 1 2 1 0 6 1 1 2 2 2 3 3 4 3 1 2 3 2 2 1 2 6 2 6 4 7 2 6 4 6 3 4 8 4 0 6 1 . 8 6 4 . 6 7 6 . 0 8	
0	2 0 2 5		. 2 5 5 . 3 3 4 . 8 0 5 . 2 3 3 4 5 3 4 4 2 3 . 5 7 1 2 1 2 2 1 2 2	
0	3 0 1 1	2	1 1 0 1 3 2 2 3 2 1 2 3 3 3 2 3 3 1 2 4 1 1 1 1 1 3 1 1 1 1 1 2 2 3 3 1 4 3 2 1 1 2 1 2 1 4 5 6 4 5 1 5 1 6 8 5 9 6 0 5 6 . 8 6 4 . 5 8 4 . 0 8 3	
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0	4 0 1 1	2	4 1 2 2 1 3 3 2 3 3 1 1 3 1 1 2 1 2 2 2 2 1 1 2 1 2 0 5 3 2 3 2 3 3 1 3 3 3 2 2 3 3 2 2 3 2 6 7 5 9 5 7 6 0 4 7 7 4 5 0 5 9 . 1 4 3 . 9 2 3 . 4 2	
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0	5 0 1 2	2	2 0 8 3 3 3 1 1 1 3 4 3 2 4 3 1 1 1 2 3 1 2 1 2 3 1 3 0 4 3 3 3 2 3 3 3 2 2 3 2 1 1 1 3 1 2 6 7 5 4 6 2 6 0 4 7 6 9 4 6 5 7 . 8 6 3 . 4 2 2 . 5 0	
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0	6 0 1 2	2	2 1 0 1 3 1 3 4 3 4 3 4 4 4 1 2 1 1 2 2 1 1 1 2 1 1 1 1 2 2 3 2 2 3 3 3 1 1 1 1 2 2 3 2 5 6 5 9 6 7 7 8 6 3 5 3 3 6 5 8 . 8 6 4 . 2 5 3 . 6 7	
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0	7 0 1 1	2	0 1 2 3 1 1 1 3 1 1 3 3 3 3 3 2 3 1 3 3 4 1 1 2 2 1 0 5 3 2 3 2 2 9 1 1 1 1 1 1 1 2 1 2 2 5 1 4 4 5 1 5 5 4 2 5 9 5 0 5 0 . 2 9 5 . 1 7 6 . 2 5	
0	7 0 2 4		. 4 2 4 . 8 3 5 . 4 0 5 . 2 1 3 5 5 5 2 4 3 3 . 8 6 1 1 1 1 3 2 1 1	
0	8 0 1 1	2	9 1 0 3 3 3 3 2 2 2 1 1 1 2 2 3 1 2 2 2 3 2 1 2 3 1 2 2 0 0 3 2 3 3 1 3 3 3 1 1 2 1 2 2 2 2 2 6 2 5 4 6 7 6 9 6 8 5 3 6 5 6 2 . 5 7 3 . 4 1 3 . 3 3	
0	8 0 2 3		. 5 8 3 . 0 8 2 . 8 0 3 . 2 4 4 3 4 2 2 3 3 3 . 0 0 2 2 1 2 2 2 1 1	
0	9 0 1 1	2	2 1 0 1 3 3 2 4 3 4 2 2 4 2 2 2 2 3 3 1 2 2 3 3 1 3 0 2 1 2 1 2 3 2 1 1 0 2 1 1 1 1 3 1 5 6 6 4 6 7 7 8 7 3 6 4 6 0 6 6 . 0 0 3 . 6 6 3 . 7 5	
0	9 0 2 3		. 6 7 2 . 5 8 4 . 0 0 3 . 5 3 2 3 4 4 2 3 3 3 . 0 0 2 1 2 2 2 1 1 1	
1	0 0 1 2	2	2 1 2 2 3 3 1 3 1 1 2 3 3 3 2 3 2 2 2 4 3 1 3 1 3 1 1 0 2 2 3 2 3 3 3 4 1 1 1 1 1 3 1 2 6 7 7 4 4 1 6 9 7 3 4 3 6 5 6 1 . 7 1 4 . 2 5 4 . 2 2	
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1	1 0 1 1	2	3 0 8 1 1 3 2 1 2 3 2 3 2 2 2 3 2 1 2 1 2 2 1 1 2 2 2 1 4 1 1 1 2 3 1 1 0 0 1 2 0 0 2 1 2 1 7 3 5 4 5 7 7 3 4 7 6 4 6 0 6 1 . 1 4 4 . 0 0 4 . 5 0	
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1	2 0 1 2	2	1 1 0 1 1 2 3 1 3 4 1 2 3 3 2 2 2 1 3 1 1 1 3 2 1 1 0 4 2 2 3 1 3 3 1 4 3 2 1 1 2 2 3 2 8 3 5 9 6 7 8 2 3 6 6 9 6 0 6 5 . 1 4 4 . 3 3 3 . 4 5	
1	2 0 2 3		. 8 3 3 . 6 7 3 . 6 0 3 . 7 7 4 3 3 2 1 3 2 2 . 5 7 1 1 1 2 1 1 2 1	
1	3 0 1 1	2	1 1 0 1 2 3 2 1 3 4 4 2 2 2 3 3 2 3 1 3 2 3 3 1 1 2 0 6 2 2 2 2 3 3 1 1 3 2 1 1 1 3 1 2 6 7 6 7 6 2 6 0 6 8 5 3 6 5 6 3 . 4 3 5 . 2 5 5 . 4 0	
1	3 0 2 5		. 8 0 5 . 5 5 6 . 8 0 5 . 6 6 3 3 3 4 4 3 5 3 . 5 7 2 2 2 2 2 2 1 1	
1	4 0 1 2	2	3 1 0 1 1 2 3 4 3 2 3 2 4 2 1 2 1 2 3 1 1 1 1 2 3 2 0 9 3 3 3 2 2 3 3 2 3 2 2 3 1 3 1 2 4 0 3 9 4 6 4 7 4 2 3 3 3 2 3 9 . 8 6 4 . 5 0 4 . 6 7	
1	4 0 2 5		. 2 7 5 . 5 0 4 . 8 0 4 . 9 5 5 4 5 3 2 3 4 3 . 7 1 1 1 1 1 1 1 1 1 2	