A FAMILY STRUCTURAL APPROACH TO THE STUDY OF ADOLESCENT DEPRESSION

TINA MARIE LINDEGREN

University of New Hampshire, Durham

Follow this and additional works at: https://scholars.unh.edu/dissertation

Recommended Citation
https://scholars.unh.edu/dissertation/2321

This Dissertation is brought to you for free and open access by the Student Scholarship at University of New Hampshire Scholars' Repository. It has been accepted for inclusion in Doctoral Dissertations by an authorized administrator of University of New Hampshire Scholars' Repository. For more information, please contact nicole.hentz@unh.edu.
A FAMILY STRUCTURAL APPROACH TO THE STUDY OF ADOLESCENT DEPRESSION

Abstract
The primary purpose of this study was to better understand the antecedents of depression among adolescents by taking a family structural perspective. Based on clinical observations, Minuchin (1974) and Haley (1976) have developed theories of family functioning which define types of dysfunctional family structures (described as patterns of relating among family members) characteristic of disturbed families. This research attempts to empirically assess these dysfunctional structures in relation to adolescent depression.

A self-report questionnaire was designed and administered to 358 students from three high schools in southern New Hampshire. The questionnaire included assessments of: (1) behavioral interactions among family members representing clinically observed family structures; (2) depression symptoms measured by the short form of the Beck Depression Inventory (Beck, 1974), behavioral measures, and delinquent activities; and, (3) interactions with peers.

Results indicated that behavioral interactions similar to clinical descriptions of dysfunctional family structures were widely reported in a non-clinical sample. Results also provided empirical support for the relationship between dysfunctional behavioral interactions among family members and depressive symptomatology in adolescents. Family structures indicating a loss of supportive and adaptive interactions among family members (e.g. frequent argumentative exchanges, destructive modes of communications and infrequent supportive exchanges) were significantly associated with reported rates of depression. Loss of supportive interactions with peers was not found to be related to depression. However, results indicated that involvement with delinquent peers was associated with reported rates of depression.

Also reported are incidence rates of depression in the sample according to the clinical levels of the Beck Depression Inventory. Females reported significantly higher rates of depression than males. In addition, higher rates of depression were reported by 14 and 15 year olds than by 18 year olds.

Discussion centers on the implications of a family structural approach to the study of adolescent depression. Research on depression which includes variables assessing family interactions is suggested. Implications of these findings for future research and therapy applications are also discussed.

Keywords
Psychology, Clinical

This dissertation is available at University of New Hampshire Scholars' Repository: https://scholars.unh.edu/dissertation/2321
INFORMATION TO USERS

This was produced from a copy of a document sent to us for microfilming. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help you understand markings or notations which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting through an image and duplicating adjacent pages to assure you of complete continuity.

2. When an image on the film is obliterated with a round black mark it is an indication that the film inspector noticed either blurred copy because of movement during exposure, or duplicate copy. Unless we meant to delete copyrighted materials that should not have been filmed, you will find a good image of the page in the adjacent frame. If copyrighted materials were deleted you will find a target note listing the pages in the adjacent frame.

3. When a map, drawing or chart, etc., is part of the material being photographed the photographer has followed a definite method in "sectioning" the material. It is customary to begin filming at the upper left hand corner of a large sheet and to continue from left to right in equal sections with small overlaps. If necessary, sectioning is continued again—beginning below the first row and continuing on until complete.

4. For any illustrations that cannot be reproduced satisfactorily by xerography, photographic prints can be purchased at additional cost and tipped into your xerographic copy. Requests can be made to our Dissertations Customer Services Department.

5. Some pages in any document may have indistinct print. In all cases we have filmed the best available copy.
Lindegren, Tina Marie

A FAMILY STRUCTURAL APPROACH TO THE STUDY OF ADOLESCENT DEPRESSION

University of New Hampshire

University Microfilms International 300 N. Zeeb Road, Ann Arbor, MI 48106
PLEASE NOTE:

In all cases this material has been filmed in the best possible way from the available copy. Problems encountered with this document have been identified here with a check mark ☑.

1. Glossy photographs or pages _____
2. Colored illustrations, paper or print _____
3. Photographs with dark background _____
4. Illustrations are poor copy _____
5. Pages with black marks, not original copy _____
6. Print shows through as there is text on both sides of page _____
7. Indistinct, broken or small print on several pages ☑
8. Print exceeds margin requirements _____
9. Tightly bound copy with print lost in spine _____
10. Computer printout pages with indistinct print _____
11. Page(s) ___________ lacking when material received, and not available from school or author.
12. Page(s) ___________ seem to be missing in numbering only as text follows.
13. Two pages numbered __________. Text follows.
14. Curling and wrinkled pages _____
15. Other ____________________________________________________________________________

University Microfilms International
A FAMILY STRUCTURAL APPROACH TO
THE STUDY OF ADOLESCENT DEPRESSION

BY

TINA M. LINDEGREN

B.A. (Psychology), Colby College, 1974
M.A. (Psychology), University of New Hampshire, 1978

A DISSERTATION

Submitted to the University of New Hampshire
in Partial Fulfillment of
the Requirements for the Degree of

Doctor of Philosophy
in
Psychology

September, 1981
This dissertation has been examined and approved.

Dissertation director, Daniel C. Williams
Associate Professor of Psychology

Ronald E. Shor, Professor of Psychology

Ellen S. Cohn, Assistant Professor of Psychology

Carolyn J. Mebert, Assistant Professor of Psychology

Murray A. Straus, Professor of Sociology

Howard M. Shapiro, Associate Professor of Sociology

Date June 15, 1981
ACKNOWLEDGEMENTS

I would like to especially thank my dissertation advisor, Daniel Williams for his time, support, and guidance throughout my career at UNH and particularly during this dissertation. He offered me direction when I was confused, humor when I was depressed, and therapy when I was neurotic. More importantly, he urged me to be independent in my thinking and my research. Although I became incredibly frustrated at times, I ultimately learned much about myself, my capabilities as a professional, and the rewarding aspects of an academic experience.

I would also like to thank Ellen Cohn for her many contributions to this dissertation and to my future career as a psychologist. She always had time for my questions and suggestions for difficult problems, she listened when I needed to express my concerns and anxieties, and basically helped me retain my sanity throughout the ordeal of getting a doctorate. Writing the dissertation was a lot easier with Ellen's support, her humor, and her faith in my ability to pull it off.

I thank the other members of my committee, Ron Shor, Murray Straus, Howard Shapiro, and Carolyn Mebert for their advice and comments during various stages of the study.
Their background and diverse experience in related fields greatly enhanced the quality of the finished manuscript.

I would also like to thank the Graduate School for awarding me a 1981 second semester dissertation fellowship. The fellowship allowed me the time to concentrate my efforts fully so I could actually meet my self-imposed deadlines.

Most of all, I thank Ted Horne, my husband and my best friend. During my many unpredictable moods, he would lift my spirits and make me laugh with a smile, a tender touch, or the famous "Horne" wink. His caring and belief in me helped me to surmount the seemingly impossible task of finishing. I thank him for his understanding, his emotional support, and most of all for his love.
DEDICATION

This dissertation is dedicated to my mother and father, two people who I love very much. I feel very lucky and quite proud to have parents who give so much of themselves to their family and friends. They touch all those around them in a special and unforgettable way. To be the most you can be has always been their philosophy. The values they believe in, the goals they strive for are very much reflected in my own accomplishments.

I share this achievement with my mother and father which makes it especially rewarding.
# TABLE OF CONTENTS

LIST OF TABLES ................................................................. ix

LIST OF FIGURES ............................................................. xi

LIST OF APPENDICES .......................................................... xii

ABSTRACT ................................................................. xiii

I. INTRODUCTION .............................................................. 1

A. Research on Adolescence .............................................. 1
   1. Adolescence as a Period of Conflict ....................... 1
   2. Recent Evidence on "Conflict" View ....................... 4
   3. Adolescent Depression - Incidence and Description .......... 5
   4. Symptoms of Depression ....................................... 7
   5. Theories of Depression ....................................... 11
      a. Psychodynamic Approach .................................. 12
      b. Behavioral Approach (S-R) ......................... 13
      c. Learned Helplessness Approach ...................... 17
      d. Cognitive Approach .................................. 19
   6. Summary and Evaluation of Theories of Depression ........ 21
   7. A Family Approach to Adolescent Depression .............. 22

B. Research on the Family .................................................. 25
   1. Structure and Power in Families ............................ 26
      a. Definition of Power ................................... 28
      b. Power in Family Sociological Research ................ 31
      c. Power as Coalitions in Social Psychological Research .... 33
      e. Parental versus Peer Influence ...................... 39
      f. Summary and Evaluation of Research on Structure and Power .... 41
   2. Family Therapy Research ...................................... 42
      a. Early Research ......................................... 43
      b. Contemporary Research .................................. 45
      c. Family Structural Perspective:
         Minuchin and Haley ...................................... 48
      d. Summary and Evaluation of Family Structural Perspective ........ 59

II. GENERAL GOALS .......................................................... 61
III. METHOD .................................................... 65

A. Sample ................................................. 65
B. Procedure ........................................... 66
C. Instrument ............................................. 68
   1. Family Structure Items ....................... 68
   2. Depression Items ........................... 69
   3. Peer Relationship Items .................. 70
   4. Demographic Items ........................... 71

IV. RESULTS .................................................. 72

A. Overview ............................................... 72
B. Incidence of Adolescent Depression and
   Family Structures .................................... 79
   1. Incidence of Adolescent Depression .......... 79
      a. BDI ........................................ 79
      b. Behavioral Measures ...................... 81
      c. Correlations between Depression
         Indices ................................... 83
   2. Incidence of Family Structures .......... 83
      a. Verification ................................ 83
      b. Frequency of Family Structures .......... 85
C. Associations with Clinical Depression ....... 94
   1. Multivariate Analyses on the Composite
      Level ........................................ 95
   2. Multivariate Analyses on the Individual
      Item Level .................................... 99
   3. Comparisons of Means for Individual
      Questions ..................................... 100
   4. Associations between Family Structures and
      Clinical Depression .......................... 102
      a. Parental Subsystem ...................... 102
      b. Spousal Subsystem ....................... 116
      c. Sibling Subsystem ...................... 119
   5. Associations between Delinquency and
      Clinical Depression ......................... 122
   6. Associations between Peer Relationships/
      Delinquent Peer Involvement and Clinical
      Depression .................................... 122

V. DISCUSSION ............................................... 133

A. Limitations .......................................... 145
B. Implications for Future Research .............. 148
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. Implications for Therapy</td>
<td>149</td>
</tr>
<tr>
<td>1. Future Research</td>
<td>151</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>153</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>162</td>
</tr>
</tbody>
</table>
LIST OF TABLES

1. Rotated Factor Loadings, Communalities and Eigenvalues for Composite Variables .............. 74

2. Means and Standard Deviations on the BDI .......... 80

3. Weekly Percents of Behavioral Indices of Depression .................................................. 82

4. Correlations of Behavioral Indices of Depression with EDI ........................................... 84

5. Descriptive Statistics and Correlations of Marital Conflict and Scapegoating Items .......... 86

6. Descriptive Statistics and Correlations of Ineffective Parenting Items ......................... 88

7. Descriptive Statistics and Correlations of Ineffective Parent-Child Interaction Items ....... 91

8. Descriptive Statistics and Correlations of Parental Child Items ................................ 92

Rotated Factor Loadings, Communalities, Eigenvalues and Percent of Variance Accounted for in Five Second-order Factors .......... 96

10. Multivariate Fs for Paired Contrast of Four Levels of Clinical Depression ..................... 101

11. Means, Omnibus Fs and Univariate Contrasts for Parental Subsystem Items ..................... 103

12. Means, Omnibus Fs and Univariate Contrasts for Spousal Subsystem Items ....................... 117

13. Means, Omnibus Fs and Univariate Contrasts for Sibling Subsystem Items ...................... 120

14. Means, Omnibus Fs and Univariate Contrasts for Delinquency Items ............................... 123

15. Means, Omnibus Fs and Univariate Contrasts for
Peer Relationship Items .......................... 126

16. Means, Omnibus Fs and Univariate Contrasts for Delinquent Peer Involvement Items ............... 130
LIST OF FIGURES

1. Means of Parental Subsystem Items .................. 108
2. Means of Spousal Subsystem Items .................. 118
3. Means of Sibling Subsystem Items .................. 121
4. Means of Delinquency Items ......................... 124
5. Means of Peer Relationship Items .................... 128
6. Means of Delinquent Peer Involvement Items ...... 131
LIST OF APPENDICES

APPENDIX A - QUESTIONNAIRE .............................................. 163

APPENDIX B1 - F Values on ANOVAs of Composite Variables by High School ................. 180

APPENDIX B2 - F Values of ANOVAs on Family Structure Composite Variables by Sex, SES and Marital Status .......................... 181
ABSTRACT

A FAMILY STRUCTURAL APPROACH TO
THE STUDY OF ADOLESCENT DEPRESSION

by

TINA M. LINDEGREN
University of New Hampshire
September, 1981

The primary purpose of this study was to better understand the antecedents of depression among adolescents by taking a family structural perspective. The rationale underlying this approach assumes that family structures, described as patterns of relating to one another and the bonds formed among family members during the socialization process, profoundly impact on the personality and psychological adjustment of the adolescent. Based on clinical observations, Minuchin (1974) and Haley (1976) have developed theories of family functioning which define types of dysfunctional family structures characteristic of disturbed families. This research attempts to empirically assess these dysfunctional structures in relation to adolescent depression.

A self-report questionnaire was designed and administered to 358 students from three high schools in southern New Hampshire. The questionnaire included
assessments of: 1) behavioral interactions among family members representing clinically observed family structures; 2) depression symptoms measured by the short form of the Beck Depression Inventory (Beck, 1974), behavioral measures, and delinquent activities; and, 3) interactions with peers representing the amount and nature of peer relationships.

Results indicated that behavioral interactions similar to clinical descriptions of dysfunctional family structures were widely reported in a non-clinical sample. Results also provided empirical support for the relationship between dysfunctional behavioral interactions among family members and depressive symptomatology in adolescents. Family structures indicating a loss of supportive and adaptive interactions among family members were significantly associated with reported rates of depression. Depressed adolescents reported family interactions indicating frequent argumentative exchanges, destructive modes of communications and infrequent supportive exchanges significantly more often than nondepressed adolescents. Loss of supportive interactions with peers was not found to be related to depression. However, results indicated that involvement with delinquent peers was associated with reported rates of depression.
Also reported are incidence rates of depression in the sample according to the clinical levels of the Beck Depression Inventory. Females reported significantly higher rates of depression than males. In addition, higher rates of depression were reported by 14 and 15 year olds than by 18 year olds. Significant associations were found between levels of clinical depression and both behavioral signs and delinquent activities across the sample.

Discussion centers on the implications of a family structural approach to the study of adolescent depression. The results indicate that the nature of family interactions seems to be a relevant variable in explaining the incidence of depression. Research on depression which includes variables assessing family interactions is suggested. Implications of these findings for future research and therapy applications are also discussed.
I. INTRODUCTION

Research on Adolescence

The term adolescence is used to characterize the period of transition between childhood and adulthood when numerous physical, emotional and social changes occur. The onset of adolescence is marked by the beginning of sexual maturation: secondary sex characteristics develop, sex hormones are produced and phenotypic differences between the sexes become apparent. Adolescents have to learn how to deal with these sexual changes and feelings. In addition, adolescence is a developmental period in which adolescents establish independence and develop meaningful social relations with members of their own sex and with individuals of the opposite sex. Adolescents are expected to loosen ties with their parents, direct their needs for support to peers and significant others, and assume major responsibility for running their lives and planning their futures.

A central task for adolescents is to develop a stable, mature identity. Erikson (1955) characterizes adolescence as a time for identity formation. As he observes (1968), a
sense of identity develops from previous identifications and roles with parents, siblings, peers, teachers and others. Who a person becomes is thus influenced by experiences and relationships in the past. Moreover, Erikson and other developmental psychologists argue that this task of identity formation does not just involve the summation of all previous identities but also the ability to "synthesize successive identities into a coherent, consistent and unique whole" (Conger, 1978; p. 172). The process of identity formation can vary, depending on such factors as family experiences, cultural norms and societal pressures. As a result, identity formation can be relatively simple or complex, typical or deviant, positive or negative, successful or unsuccessful (Conger, 1977; Hauser, 1976; Marcia, 1976; Waterman and Waterman, 1974; Douvan and Adelson, 1966).

Adolescence as a Period of Conflict

Faced with this task, the adolescent often times experiences difficulties, perhaps even upheavals, in coping with him/herself and others. In fact, adolescence has been described as the "age of turmoil" and as a period of "storm and stress" (Hall, 1904). Blos (1970) states that "the more or less orderly course of development during latency is thrown into disarray with the child's entry into adolescence ... adolescence cannot take its normal course without regression" (p. 11). According to many researchers, regression during adolescence is a normal developmental
phenomena (French and Berlin, 1979). This view sees the well-adapted preadolescent entering the "age of turmoil" to become a rebellious individual at odds with parents, peers and teachers.

Theories of adolescence, for the most part, seem to support this view that adolescence is a time of conflict: parent-child relations are stressful, anti-social behavior is more frequent, and alienation from previously accepted values becomes the norm. This "conflict" position emphasizes adolescence as a unique stage in development during which rebellious behavior is expected and accepted as individuals try to develop their identity and "find themselves."

According to this "conflict" view, adolescence is seen as a psychologically disturbing period as well. Eissler (1958) describes it as "stormy and unpredictable behavior marked by mood swings between elation and melancholy" (p. 224). Neurotic symptoms can be manifested along with delinquent behavior and psychosomatic disorders. This widespread belief consequently creates confusion over the nature of normal and abnormal behavior in adolescents. Clinicians are frequently reluctant to diagnose or treat apparent behavioral or psychological problems in teenagers (Weiner, 1975). When psychological disturbance is present, it is attributed, for the most part, to unstable conditions and upheavals characteristic of adolescence. If diagnosed, the most common category is "transient situational
disorders" and the best cure seen is the passage of time and general maturation (Winnicott, 1971).

Recent Evidence on "Conflict" View

More recently, data suggests that adolescents do not necessarily go through a period of turmoil resembling psychopathology as a normal developmental stage. In a review of these studies, Weiner (1975) reports that: 1) adolescents do not demonstrate more psychological disturbance or instability than do adults, and that 2) there is no basis for assuming that the "troubled" adolescent will "grow out of" his/her adjustment difficulties. The first point argues against the view of adolescence as a normal time for conflict and disturbances to occur. In fact, researchers (Bandura and Walters, 1959; Douvan and Adelson, 1966; Rutter, et al., 1970) have found that although adolescence is a time of readjustment, it does not have to be stressful. These findings report that the majority of adolescents do not hate their parents, rebel against societal values or experience severe inner conflict.

The second point is important because it reveals that when adolescent disturbances do occur, they are likely to persist into adulthood. More attention needs to be paid, then, to precise diagnosis and treatment of such disorders. The adolescent tasks of identity formation, separation from family, achieving independence, and forming intimate relationships with others may provoke disturbances in some adolescents which are not transient or temporary but rather
reflect persistent and long-lasting psychological disorders. **Adolescent Depression: Incidence and Description**

One common psychological disturbance diagnosed in adolescents is depression. In recent years, increasing concern has been paid to the manifestation of depressive tendencies in adolescents. Estimates of depression, however, vary widely depending on the criteria and setting. In studies of adolescent populations in Edinburgh, Henderson, McCulloch and Phillip (1967) and Evans and Action (1972) reported that 64 percent of those who came for psychiatric help had clinical depression. An epidemiological study conducted by Rutter (1976) looked at rates of depressive symptoms prevalent in 2303 14-15 year olds. Approximately 12.8 percent of the sample were reliably judged to have symptoms of depressive disorders like those observed in clinical samples. When rates of depression in clinically diagnosed depressed adolescents are used, the percentages drop considerably. Weiner (1975) presents Public Health Services statistics for rates of depression among adolescents at outpatient services and general hospitals. For patients ages 10-14, 1.7% were diagnosed as depressed at outpatient services and 5.8% at general hospitals. This rate almost doubles in the 15-17 age group (3.3%, outpatient services; 11.6%, general hospitals) and jumps dramatically again for 18-19 year olds (7.6%, outpatient services; 15.8%, general hospitals).
In both settings, female patients at all ages were more likely to be diagnosed as depressed than male patients (e.g., 15-17 year olds at general hospitals: females, 13.8%, males, 8.8%). In fact, the incidence of diagnosed depression in women of all age groups is higher than in men. Weissman and Klerman (1977), in a survey of incidence rates for the past forty years, report the ratio of depression in women to men as two to one. They acknowledge that genetic factors might play a role in the etiology of depression, but conclude that "currently the evidence from genetic studies is insufficient to draw conclusions about the mode of transmission or to explain the sex differences" (p. 204). Weissman and Klerman hypothesize that the disadvantaged social status of women may have psychological effects leading to depression. Briefly, they hypothesize that in a patriarchal society, women are socialized to be submissive and dependent on male dominance. Frustrations at not being able to achieve important goals and feelings of helplessness are assumed to lead to depressive feelings. Weissman and Klerman speculate that families which practice gender prejudice, favoring the boy over the girl, may impose an inappropriate sense of duty and submissiveness in adolescent girls. According to this hypothesis, cultural factors are seen to play an important role in the higher incidence of depression in adolescent women. However, no systematic empirical research has investigated this hypothesis.
From the above studies and reported data, it is impossible to conclude actual rates of depression in adolescents, although many researchers use twenty percent as an approximate rate (Raskin, 1977). The high and variable rates observed in general populations could be attributed to different criteria employed for assessment while the low rates reported in clinical settings suggest that depression may be underdiagnosed. In view of the increasing rates during the adolescent years, the possibility still exists that depressive disorders are part of the developmental process and not indicative of psychopathology.

**Symptoms of Depression**

One major problem of diagnosis lies with the absence of specific, acceptable criteria for assessing adolescent depression. Depression has been used to characterize a variety of affect states such as unhappiness, grief, disappointment, and helplessness. A distinction is necessary between depression viewed as a symptom (sadness, melancholy mood) and depression viewed as a clinical syndrome. The depressive syndrome, as it exists in adults, is marked by: dysphoric affect; psychomotor retardation; feelings of hopelessness and helplessness; suicidal thoughts; and guilt and self-deprecation feelings (Weiner, 1975). The question arises as to the presence of this syndrome in younger individuals.
Symptoms differ according to the age of the adolescent. Younger and older adolescents may feel or act differently according to developmental styles, contextual situations and personal experiences. Findings from several studies (Connell, 1972; Cytryn and McKnew, 1974; Frommer, 1968; Kuhn and Kuhn, 1972; Ling, et.al., 1970; McConville, et.al., 1973; Weinberg, et.al., 1973) report the following symptoms as descriptive of depression in younger adolescents (prior to the age of 16): irritability and tension; social withdrawal; lack of energy; somatic complaints other than headaches; school phobia; sleep disturbances; weight loss and anorexia; and acting-out behavior. These studies agree that depression in younger adolescents involves some negative cognitive change, attitudinal-motivational changes, and autonomic and psychomotor disturbances. However, there are distinct differences between characteristics reported by younger adolescents and those reported by adults. First, the dysphoric mood characteristic is not considered a primary symptom as it is in the adult syndrome. This finding may be explained in part by the fact that younger people are more oriented towards doing things rather than thinking about them. Consequently, depressive disorders would be manifest in overt behaviors more than introspective feelings. Secondly, younger adolescents do not report an overwhelming dread of the future as do adults. Furthermore, although these studies report similar symptoms as descriptive of depression, there is no overall agreement as
to the specific symptoms comprising the syndrome.

Older adolescents (ages 15-18) are more likely to exhibit symptoms of depression similar to the adult syndrome. They become oriented toward ideational and expressive ways of coping with their experiences and are able to share these feelings with others. Weiner (1975) reports that older adolescents express symptoms characteristic of the adult syndrome in terms of mood changes, yet still may express depression indirectly through maladaptive behavior. He lists these behavioral indices as drug abuse, delinquency, sexual promiscuity, suicidal behavior, and alienation.

Depression in adolescents is therefore of concern because it may contribute to these maladaptive behavior patterns. For example, delinquency and drug abuse can be a result of attempts to ward off depressing feelings of failure and inadequacy. Erikson's concept of negative identity formation (1955) suggests that adolescents who cannot adopt the roles and identities valued by important people in their lives instead choose an identity "preversely based on those identifications and roles which, at critical stages of development, had been presented to the individual as most undesirable or dangerous." By becoming a "somebody", even if somebody bad, the adolescent receives attention from others that has been lacking in his/her life. This negative identity formation can appear in the form of delinquency or drug abuse. The adolescent is not taking a constructive
alternative approach to life. Rather, he/she is emphasizing opposition for its own sake and behaving in maladaptive and self-defeating ways.

Alienation can also be the result of depression. Alienated adolescents are characterized by a lack of energy, cynicism, no commitment to long-range goals, involvement in "far-out" causes, and critical of anything conventional (Teicher, 1972). The lowered activity level of an alienated individual is viewed as a symptom of depression. Afraid of failure or inadequacy, an adolescent can become depressed and avoid disappointment by alienating him/herself from others.

The research reported above suggests that depression in adolescents is a serious disorder and may have harmful consequences. However, to date, research on adolescent depression has not clearly identified the symptoms and possible causes which could aid in a better understanding of the phenomena. The question of whether adolescent depression represents a psychological disorder similar to the adult syndrome or whether it reflects a transient developmental phenomena is far from being adequately answered and needs much additional research. The belief that adolescents should not display such characteristics has certainly hindered advancement in this area. And, at the beginning stages of research, it is not uncommon to find a plethora of behavioral and emotional problems being attributed to the label "depression". In fact, it may well
be the case that depression is too broad a category and not
descriptive of any observable or definable disorder. Several classifications of depression have been proposed. For example, Cytryn and McKnew (1972) have developed a classification of depressive disorders that differentiates an acute depressive response from a depressive illness of long duration. Three types are delineated: 1) masked depressive reaction, characterized by hyperactivity, aggressive behavior, psychosomatic illness or delinquency; 2) acute depressive reaction, resulting from an identified environmental cause and lasting only a short period of time; and, 3) chronic depressive reaction, which has no identifiable triggering event and is evidence of a long-standing depression. This classification allows for an investigation of depression in adolescents which excludes those symptoms characteristic of a transient grief reaction or behaviors associated with the adolescent developmental phenomena.

Theories of Depression

A standard and acceptable set of criteria to describe adolescent depression is but one avenue of research toward clarification of this field. A second approach would be to start with the existing theories of depression to see if they shed light on the understanding of depressive disorders and lead towards testable hypotheses. Although these theoretical formulations differ as to the specific causes hypothesized to result in depression, the key emphasis of
these theories is their primary focus on the individual. Depression is conceptualized as resulting from an individual experiencing a sense of loss in some form. A brief summary and evaluation of these theoretical approaches will serve to demonstrate this perspective.

**Psychodynamic Approach**

The psychodynamic theory of depression emphasizes internal psychological processes in dealing with loss (Kovacs and Beck, 1977; Weiner, 1975). Certain early childhood experiences are believed to predispose individuals to become depressed. These early experiences occur when a child's needs are not adequately met during psychosexual stages of development. This is particularly important in the oral stage. If an infant is not sufficiently gratified for his/her needs from significant loved ones, the infant sees this as a lack of love and evidence that he/she is not worthy of love. The child then develops a profound sense of ambivalence towards others and towards him/herself. The striving for love and satisfaction is blocked by feelings of hostility towards others who could or should gratify these needs. This hostility, which is not expressed directly, is therefore turned against the self which results in self-hatred and low self-esteem. When these individuals later encounter frustrations such as the real or fantasied loss of a loved one, loss of a personal relationship, loss in terms of personal or economic failure, or loss of health or power, depression can occur. These frustrations
reactivate the feelings of ambivalence and self-hatred, factors which redi
pose the individual to become depressed.

In relation to adolescent depression, the tasks of separation from the family ties and achieving identity, independence, and intimacy with others can present the adolescent with a number of real losses and threats to his/her self-esteem. Freud (1905) described the detachment from parental control as "one of the most significant, but also one of the most painful, psychological achievements of the pubertal period" (p. 227). Early experiences are thus considered crucial in preparing the adolescent to cope with loss and frustration. According to this theory, the importance of these early experiences centers on internal psychological processes involved during an individual's development. This formulation, however, has been difficult to empirically investigate and verify. In order to progress towards an understanding of adolescent depression, investigators need to provide testable hypotheses of the psychodynamic theory of depression.

Behavioral Approach (S-R)

Behavioral theories view depression generally as an extinction phenomena. Loss in this sense is in terms of inadequate or insufficient positive reinforcers. Individuals become depressed when interactions with other people and the environment are not rewarded. Several formulations have been developed in an attempt to conceptualize and explain depression in behavioral terms.
According to Lazarus (1968), a depressed individual is on an extinction schedule where lack of reinforcement results in a diminished and weakened behavioral repertoire. When a positive reinforcer is removed or certain behaviors are not reinforced, an individual tries to use other available reinforcers or alternative behaviors. If unsuccessful, a chronic non-reinforcing state of affairs results which leaves the individual relatively immune to most stimuli and in a state of depression.

Ferster (1965, 1975) defines depression as a reduction in previously successful behaviors. He cites several factors which can contribute to behaviors losing their reinforcement value. Sudden changes in the environment can weaken behavior. For example, when a significant person dies, many behaviors may have been reinforced or associated with this person. Eliminating this reinforcement and interaction can lower an individual's activity level and lead to depression. Interactions associated with punishment or aversive consequences can also lead to avoidance of these behaviors in the future. According to Ferster, characteristics of depression, such as loss of certain kinds of activity and psychomotor retardation can be related to a loss of positive reinforcers while crying, irritability, and complaining are seen as products of avoidance and escape activity.
Lewisohn and others (1968, 1974, 1978) believe that the low rate of rewarded behavior is an adequate explanation for only part of the depressive syndrome, namely the lowered activity level. Lewisohn introduces several additional assumptions to account for other aspects of the depressed individual's behavior and psychological state. First, he sees a causal relationship between the low rate of positive reinforcement and feelings of dysphoria. When interactions with others and behaviors are continually unrewarded, these can act as eliciting stimuli for such depressive symptoms as dysphoria, fatigue and other somatic conditions. Dysphoric feelings produce an unpleasant emotional state which the depressed individual tries to explain. He/She commonly labels this emotion in terms of somatic complaints (feeling sick), low self-esteem (feeling inadequate), and social isolation. Here, the cognitive changes of low self-esteem, pessimism and guilt are viewed as consequences of dysphoric feelings which in turn are a result of the low reinforcement rate.

Second, Lewisohn emphasizes that the social environment can serve to maintain depressive behaviors. On the one hand, receiving sympathy, attention and concern from others when a person is depressed may in fact reinforce these behaviors. On the other hand, people may find such depressive behaviors aversive and will tend to avoid the depressed individual. He/She thus has less opportunity to receive positive reinforcement from others, and the
depressive state is consequently perpetuated. The role of repressed hostility, central to the psychodynamic theory, is also explained in terms of low positive reinforcement and the social environment. When behavior is not rewarded, aggressive behavior can occur as a response. These expressions of aggression can serve to alienate other people and contribute to an individual's social isolation. He/She then learns to avoid these hostile tendencies by not displaying them.

Lewisohn also states that a crucial antecedent in the development of depressive behavior seems to be a lack of social skills. Somewhere in the individual's reinforcement history, effective behaviors which elicit reinforcement from the environment were not learned or observed. If an individual does not possess these skills or has not learned how to use them, there is less opportunity for positive reinforcement and the development of a wide range of instrumental behaviors. Here, Lewisohn emphasizes the importance of learning these behaviors and skills during the socialization process of a child's development.

The reinforcement theory of depression has several implications for adolescent depression. Analysis of behavior in terms of avoidance responses or the lack of positive reinforcement can help to explain depressive behaviors. However, its focus is on the quantification of behavior and the individual's reinforcement history. The theory says little about the psychological aspects of the
depressive mood state or how social interaction processes contribute to or maintain such behavior.

**Learned Helplessness Approach**

Seligman (1975) has applied his model of learned helplessness to depression. The concept of learned helplessness was first observed in animal experiments (Seligman, Maier, and Solomon, 1971). Seligman found that when dogs were exposed to inescapable shock over a period of time, these animals would stop trying to respond and avoid the shocks. He used the term "learned helplessness" to describe the passive and helpless behavior of the animals placed in this experimental situation. Additional symptoms of learned helplessness in these animals were reported to be: passivity when exposed to later trauma, retarded adaptive behavior, lack of aggressiveness and competitiveness; weight loss; undereating, and signs of fear and anxiety. The similarities between these symptoms and those of depression led Seligman to generalize this model to explain depressive behavior in humans.

The critical factor in learned helplessness is the perceived lack of control over a traumatic event. An individual feels helpless because his/her responses and the desired reinforcement are independent. Seligman argues that a depressed individual has a history marked by a failure to control environmental rewards. This pattern of an inability to deal with the environment becomes established as a life style for the individual. When people learn to believe that
they have no control over stressful events in their life, they lose the capacity to relieve the suffering incurred by this stress. They perceive themselves as being unable to change situations and consequently fall into a state of passivity, misery and hopelessness.

In relation to adolescent depression, studies have demonstrated that helpless adolescents, confronted with failure in achievement situations, become passive, demoralized and incompetent. They attribute their failure to an inability to cope which is similar to several symptoms of depression (Dweck and Reppucci, 1973; Dweck, 1975). There are several problems with this theory as an explanation of depression, however. First of all, it has not been demonstrated that adolescents displaying helplessness are also depressed. The concept of learned helplessness may be a necessary but not sufficient condition for the occurrence of depression.

Secondly, the learned helplessness model does not account for all of the symptoms associated with depression. According to Seligman, depression does not reflect a generalized pessimistic outlook but rather a pessimism specific to the effects of one's own behaviors. The model focuses on the individual's interpretation of his/her environment with less attention to interpersonal or social factors.
Cognitive Approach

The cognitive theory of depression emphasizes the role of cognitive factors. Beck (1970, 1973, 1976) believes that the affective depressive state is a result of the way an individual conceptualizes his/her experiences. Depressed people view themselves, the world and the future in negative terms which often represent distorted ways of viewing reality. Consequences of this type of thinking are exaggerating certain events, making absolute or overgeneralized judgments and drawing inferences without adequate evidence. In addition, this way of thinking leads people to see themselves as "losers" who then dwell on imagined losses and exaggerate real losses.

Beck sees depressive symptoms as resulting from these negative and distorted ways of thinking. If an individual views a situation or him/herself unpleasantly, then the response will also be unpleasant and negative. Self-blame and passivity become primary personality characteristics of a depressed person. Beck is unclear as to how this cognitive process develops, although he cites such instances as the loss of a parent, continual rejection by peers or an abundance of stressful events which can sensitize one to become depression-prone. Further investigation to identify such antecedents is needed to clarify this cognitive process.
Beck's cognitive theory is directed specifically towards the phenomenon of depression. However, other cognitive theories in psychotherapy also recognize the importance of one's cognitions and beliefs in affecting psychological health. Ellis' rational-emotive theory is most similar to Beck's formulations. Ellis (1973) argues that the root of psychological disturbance lies in an individual's irrational thinking. Irrational beliefs are characterized by a demanding and absolute mode of thinking where wants and desires become "musts" and "commands." Typically, such irrational beliefs produce emotionally upsetting consequences and psychological disturbances. Individuals establish and perpetuate negative and self-defeating thoughts which lead to problems of self-depreciation, low self-esteem, and feelings of worthlessness. Oftentimes, these individuals become depressed and fall into a vicious cycle where depression leads to more depression, and the future seems bleak and utterly hopeless. Here, Ellis and Beck concur that the core of disturbance is cognitive; symptoms observed are consequences of this type of irrational thinking.

In therapy, Ellis (1973) uses an active directive approach in dealing with irrational thinking. He challenges his clients' irrational beliefs and helps them to replace irrational with rational thinking. Clients are forced to examine their beliefs about themselves and are taught to actively change these self-defeating beliefs and
accompanying behavior. Thus, emotional disturbance, of which depression is one example, can be overcome by challenging and changing irrational beliefs to rational ones.

Summary and Evaluation of Theories of Depression

The theories presented above illuminate different factors contributing to the development and maintenance of depression. Psychodynamic theory views early childhood experiences in dealing with loss of a loved object or insufficient gratification from loved ones as predisposing factors of depression. Behavioral (S-R) theories focus on the loss of positive reinforcement and the lack of appropriate social skills as primary antecedents of depression. Seligman's learned helplessness model, behavioral in nature, centers on the lack of control over one's environment and the consequent established pattern of helplessness as precursors to depressive behavior. The cognitive theories of Beck and Ellis postulate that negativistic and irrational thinking lead to depressive feelings and behavior. Although differing in focus, each theoretical formulation operates from an individual level of analysis (i.e., focuses upon the individual person as the appropriate unit of analysis) in attempting to identify factors leading to depression: for example, internal psychological processes in psychodynamic theory, individual reinforcement history in behavioral theory and the learned helplessness model, and individual thinking processes in
cognitive theory.

**A Family Approach to Adolescent Depression.**

There is a noted absence of any systematic employment of broader levels of analysis to try to understand depression, namely, an approach which takes into account the dynamic processes of interactions with family members and significant others in the social system. Although researchers have begun to view the family environment as a possible contributing factor, this research still conceptualizes this influence in relation to the individual. For example, families with one or more parents who are depressed and families who have lost a parent have been cited as encumbering unrewarding and sometimes pathological environments which could possibly lead to depression (Gittelman-Klein, 1977; Anthony, 1975).

Considerable research on the family indicates that although the family is influenced by outside institutions and societal systems, its internal interaction has considerable influence on the well-being and functioning of its members (Levinger, 1975). This view looks at psychological health or disturbance not in terms of the individual but in terms of the family as a whole. How members interact and relate to one another can have important impact on their psychological development. Schizophrenia, other psychiatric disorders and delinquency have been studied in relation to family interaction patterns; however, there has been little systematic
investigation dealing with interaction patterns as they impact on depression. This study proposes to use a family level of analysis in studying depression. The influence of the family may be particularly crucial during adolescence as the adolescent attempts to cope with forming new relationships, roles and a mature identity outside the family. The better prepared the adolescent is to face these changes may well be a function of how the family operates as a whole. Unfortunately, thus far, the influence of family organization and a family level of analysis have been given little attention in the adolescent depression literature.

In this dissertation, the concept of loss as a precipitating factor in the onset of depression is reinterpreted from a family level of analysis. Loss in this view is seen not in terms of discrete life events and acute conditions such as the loss of a loved one or of specific reinforcers but rather in terms of ongoing relationships among family members. Specifically, if experiences in the family milieu result in unsatisfactory or even maladaptive patterns of interactions being established, the adolescent may experience loss in the sense of a chronic lack of support and communication from other family members. These conditions over time could be just as devastating as discrete individual losses occurring.

In addition, a review of research on suicidal behavior among adolescents clearly demonstrates the important role of the family in suicide attempts and actual suicides.
Depression has been reported as the form of psychopathology most frequently involved in attempted suicides (especially among females) and actual suicidal behavior, the second leading cause of death among 15-24 year olds in the United States (Weiner, 1977). As a consequence, research focusing on adolescent depression has dealt primarily with depression in relation to attempted suicide. Studies on the etiology of suicide attempts among adolescents report that many times attempted suicide is related to problems in family relationships, communication problems between parents and adolescents, family alienation, scapegoating practices, absence of peer relationships and a breakdown of meaningful relationships (Beck and Beck, 1975; Corder, et.al., 1974; Jacobs, 1971; Richmond, 1979).

The link between depression and attempted suicide (Birchnell and Alarcon, 1971; Cerny and Cerna, 1964; Silver, et.al., 1971) suggests that family dynamics are also intrinsically related to adolescent depression. It is anticipated that an investigation from a family level of analysis would lead toward a greater understanding of the development and maintenance of adolescent depression. A review of literature on the family is presented below to illuminate factors of the family environment which are cited as important and inherent aspects of family functioning.
Research on the Family

Burgess (1926) was the first researcher to conceptualize the family as a "unity of interacting personalities." In a commentary reviewing family research from both a comparative and historical perspective, he found the patterns of personal relationships within the family to be a key concept. Family members come to define themselves in terms of the roles and patterns developed through family interaction. Subsequently, considerable research from different disciplines has focused on the family as a small-group phenomena and its relation both to society and to family members' personal adjustment. To understand the individual from a family level of analysis, a discussion of this research on family organization is necessary.

Two main bodies of family literature are relevant to this study. The first reviews research on the notions of structure and power in the family from sociological, social psychological and developmental perspectives. The focus is on describing the nature of family interaction according to its regularities and patterns. Family therapy research comprises the second area of literature; primarily, this research draws from clinical observations of family interactions to describe the role of the family in individual adjustment and maladjustment. The focus centers on differentiating normal from abnormal families in terms of
interaction patterns, communication styles and established structures. Concepts and general findings from both research orientations will be reviewed below.

**Structure and Power in Families**

Family researchers, especially sociologists, have been interested in finding concepts to explain or to at least describe the observed patterned interaction among members of family groups. Concepts such as structure and power have been found to be useful in the study of family interaction. A theoretical framework which aids in organizing this research is general systems theory (GST). First formulated by von Bertalanffy (1968) to describe biological systems, several principles of general systems theory have been applied to the study of the family. Briefly, GST conceptualizes a group of individuals (a system) as interdependent. An understanding of the system can best be achieved by examining its relationships and interactions among members. A member is not studied in isolation but rather is considered in relation to the entire family system. The system is organized according to hierarchical levels which serve to structure the nature of interactions. In relation to the family, this hierarchical structure is generally in terms of generational lines. The system also regulates itself through the process of feedback and reciprocal actions. Members adjust to one another's interactions and to influences outside the system while maintaining the system's internal organization and
hierarchical structure. Thus, a systems approach views the interactions among family members as organized and maintained both through hierarchical position and mutual relationships among members.

The notion of family structure is fundamental to the conceptualization of the family as a system. The continuing interaction of family members results in established patterns and structural regularities which can impact on members' development. Examples of several theoretical formulations and studies from sociology will serve to demonstrate the importance of structure in the family system.

Hess and Handel (1959) propose a framework to describe the relationship between structure and personality development in families that is based on the family as a system. They see the family as having definite pattern and form based on continual interaction. In describing the complexities of this family interaction, they propose the two concepts of separateness and connectedness which are fundamental to their framework of family functioning. This aspect of family structure "... is of considerable significance, for the individual's effort to take his own kind of interest in the world, to become his own kind of person to proceed apace with his effort to find gratifying connection to other members" (p. 5). Hess and Handel indicate that families which are oriented toward either structural extreme have limited experiences which affect the
cognitive and personality development of its members.

Reiss (1971) conceptualizes three types of overall family structures as a function of how members relate to one another and to the environment. In "consensus-sensitive" families, members are totally dependent on one another for support. Interaction patterns are rigidly fixed which preclude new patterns to form with individuals outside the family. In a sense, these families can be said to be "connected." In "interpersonal-distance sensitive" families, members do not provide each other with the necessary emotional support and bonding; consequently, members must look to the environment to establish important relationships. This type of family structure is "separate." In "environmental-sensitive" families, members relate well both to other members and to the outside environment, establishing adaptive interactions. Reiss has used this typology to assess problem-solving effectiveness in families and individual thinking processes.

Definitions of Power

Family structure has also been investigated in terms of power. In fact, the study of power in relation to the family system has received much attention in family literature. According to Straus (1964), the variables of power and support can aid greatly in the understanding of family interaction, parent-child relationships and personality development. Blood and and Wolfe (1960) state that "the most important aspect of family structure is the
power position of its members." The concept of power is considered to be fundamental to all kinds of social interaction (Olson and Cromwell, 1975). Consequently, in relation to the family, power has been the focus of study across the disciplines of family sociology, social psychology and child development. Although these perspectives concur that power is a central dimension, the complexity of the concept and the different research methods used to investigate it has created confusion over its function in the family.

One major problem lies in defining the concept of power. In a comprehensive review of literature on family power, Olson and Cromwell attempt to clarify both its definition and dimensions. They first state that family power should be considered as a system property which cannot be studied apart from that system. Family power is then defined as the "ability (potential or actual) of individual members to change the behavior of other family members." The multi-dimensionality of the concept of power is reflected by the various theoretical approaches used to study power. Olson and Cromwell delineate three conceptual domains of power: the bases of family power, which describe the resources an individual possesses which can aid in controlling a situation; family power processes, which focus on how power is used in interactions between family members; and family power outcomes, which concern research on who makes the decisions in the family, the resulting power
structure established in the family and the consequences of these different power structures.

In reviewing this research from different disciplines, several issues need to be addressed. First, although Olson and Cromwell describe power as a system property, it generally has not been investigated as such. Most research considers power as a static concept in terms of the individual rather than in terms of a relative, dynamic property occurring in interactions among family members. According to Olson and Cromwell, this is demonstrated by the wealth of studies which investigate how individual power bases and power outcomes affect family functioning and structure with relatively little research concerned with power as an interactive process.

Secondly, the confusion in findings reported may be due to the various operational definitions and measures employed. Methodological studies on various power measures (Olson and Rabunsky, 1972; Turk and Bell, 1972) report inconsistencies both in the power measures employed (e.g., self-report and observational methods) and in their reliability and validity. Consequently, there is still no agreed-upon theoretical approach to the study of power nor is there a reliable measure of power. Therefore, the varied findings and descriptions of power structures in families are a result of a still unclear research field. Nevertheless, this research does shed light on the internal workings of the family and provides descriptions of family
interaction according to different types of family structures.

**Power in Family Sociological Research**

Research from the family sociological perspective generally focuses on the individual bases of power and the outcomes of decision-making tasks as they relate to family power structures. Bases of power are researched primarily in terms of different resources individual members possess. The relative importance of these resources or bases of power are said to vary with sex, age, social class and education (Ravens, Centers, and Rodrigues, 1975).

When outcomes of decision-making tasks are employed to determine conjugal power in the family, three general types have been reported: husband-dominated, wife-dominated and egalitarian or shared power (Bowerman and Elder, 1964). Blood and Wolfe (1960) developed the resource theory in an attempt to explain the bases for these different types of family power structures. According to the resource theory, the person who contributes the most socioeconomic resources to the relationship will be the most powerful. These resources are defined in terms of their value to family members. A person who controls the resources which can satisfy another person's goals, needs or desires is seen as the person in power. Thus, this theory assumes that the spouse who possesses valued extrafamilial resources such as income, educational skill and occupational status will be the dominant leader in the family. Blood and Wolfe report
that these structures vary according to social class. For example, wife-dominance has been found to be predominant in blue-collar families while husband-dominance is more common among white-collar families. In a study of adolescent perceptions of family power structures (1964), Bowerman and Elder found the egalitarian structure to be the most common followed by husband-dominance and wife-dominance structures.

However, studies across cultural contexts (e.g., Safilius-Rothschild, 1967) reveal conflicting findings. In underdeveloped countries, an increase in resources possessed by one spouse did not correspond to their participation in family decisions or to their relative power. Consequently, theories which incorporate resource in a cultural context (Rodman, 1972) and normative expectations of family decision making (Burr, 1973) have been developed. In addition, Heer (1963) suggests that social-psychological attributes such as personal attractiveness and competence should be considered as valued resources in addition to the socioeconomic resources proposed by Blood and Wolfe. Here, the differential value placed on these various types of resources is hypothesized to impact on the relative power of the husband and wife.

In summary, family sociological research on power generally concentrates on resource and status attributes of family members to demonstrate and describe family power structures. Power is conceptualized primarily as an individual property rather than as a process influenced by
ongoing interactions among family members.

Power as Coalitions in Social Psychological Research

In considering power structure in the family, the relative power relationships among members also need to be taken into account. To view family power structure in terms of a hierarchy of most powerful to least powerful is an oversimplification which neglects the system properties of relatedness among members. Most families with more than two members have the potential to establish coalitions. When two family members bond together against another member, the power structure can be altered. According to Caplow (1956), the tendency to divide into a coalition of two people against a third person is a naturally occurring phenomena in any group. He proposes that coalitions are formed according to each member's relative power, influence and status within the group.

Considerable research has investigated coalition formation in group interaction in relation to social power. This research has been conducted primarily by social psychologists with small groups in a laboratory setting. Experimental games are used in which players have options to form coalitions with other players. Different coalition formations are predicted according to the resources and power possessed by coalition members and the rewards gained from specific formations. Several theories based on the gaming paradigm attempt to explain the formation of coalitions based on the distribution of power or resources.
The minimum resource theory (Gamson, 1964) predicts that people will coalesce with others based on the initial resources each member brings to the situation; an individual will form a coalition with the other member who can provide the minimum amount of resources necessary to win. The pivotal power theory (Collins and Raven, 1969), on the other hand, predicts that people will coalesce according to their perception of their own "power," the ability to turn a losing coalition into a winning coalition rather than on the basis of their resources. Vinacke and Arloff (1957) proposed the "anti-competitive theory" which predicts that in many situations coalitions will not form because members do not want to initiate conflict with or discriminate against other members. Still another theory, the "utter confusion" theory (Gamson, 1964) states that many coalitions are formed without any clear indication of why. Kamorita and Chertkoff (1973, 1974) propose more sophisticated models of coalition formation according to the bargaining ability of each member and group size.

These theories describe predictions that can account for coalitions that occur primarily in temporary and induced-conflict situations. However, it can be argued that this direction of study concentrates on the political and economic aspects of coalition formation in terms of larger groups without taking into account interpersonal psychological influences in family interaction (Levinger, 1975). Furthermore, coalition theory in this context deals
with reward and power, with winning and losing and with the division of points, votes or some other concrete outcome in a game framework that emphasizes mathematical outcomes to the neglect of the socio-emotional factors of an ongoing interpersonal situation.

In terms of the family, the theory of coalition formation is directed at the role coalitions play in maintaining effective family functioning, although these conceptualizations currently are more theoretical than empirically based. Caplow (1968) applies his theory of coalition formation to the primary triad of father, mother and child. He identifies three types of family coalitional structures in terms of resources, power and hierarchical status of family members. In the patripotestal family, the father is the authority figure with enough power so that his control in the family cannot be overturned by any type of coalition between the mother and child. The mother and father are equal in power and resources in the equipotestal family. Caplow predicts that this type of family triad can induce a situation where either parent can be dominated by a coalition of the child with the other parent. Consequently, even when mild paternal authority develops, this dominance by the father can be offset by a mother very involved with the family and the child. In the matripotestal family, the father exists as a marginal member of the family. A coalition of the mother and child often exists to maintain authority against the distant father in this type of triad.
Here, Caplow employs the notion of coalition to describe different types of power relationships among family members. He argues that the family group must be viewed in terms of ongoing interactions rather than in terms of outcomes. Family members interact with one another continuously, and members alternate among numerous coalitions in day-to-day life. Consequently, the concepts of "winning" and "losing" should be considered in terms of negotiations which result in mutually acceptable compromises and not in terms of "winner" or "loser" outcomes. Furthermore, coalitions in families are not formed only in conflict situations; rather, they are also directed at increasing solidarity, affection, and loyalty among family members. The family system is dependent on the continued participation and interaction of all its members in order to survive and continue. The concept of power may not be sufficient to explain the bases for coalition formation in families. Investigations which take into account ongoing interactions and the interrelatedness among family members would provide a more comprehensive analysis of the adaptive functions coalitions play in family experience.

Power in Parent-Child Interaction Processes

The field of child development has focused considerable attention on the effects of parental behavior on children. The ways in which parents nurture and guide their children can affect a child's and adolescent's adjustment capabilities. In a comprehensive review of research on
parent-child relations, Rollins and Thomas (1979) cite power and support techniques as the two variables most often researched.

The research on power techniques in child rearing has produced conflicting and confusing findings, due again in large part to the different conceptual and operational definitions employed. Rollins and Thomas have attempted to clarify this confusion by defining power in terms of control attempts parents use toward the child. They differentiate control attempts into three types of parenting behavior: coercion, induction and love withdrawal. Coercion refers to direct external pressure by the parent. Hoffman (1970) operationalizes this term by citing behaviors such as physical punishment, deprivation of privileges or threats. Hoffman describes induction as any behavior by the parent which tries to induce the child into voluntarily complying with parental wishes by giving reasons for such compliance. Finally, love withdrawal refers to parents' ignoring, isolating or rejecting a child when that child has done something the parents do not like (Aronfreed, 1969). Implicit in this control attempt is the understanding that the parents will not restore their love until the child changes his/her behavior. Parental support, on the other hand, is generally viewed as any parental behavior toward the child that makes the child feel comfortable and accepted. Operationally, parental support is defined in terms of behaviors such as approving, encouraging, helping,
cooperating, expressing terms of endearment and physical affection (Straus and Tallman, 1971).

Most typically, researchers correlate these parental behaviors of control attempts or support with various child behaviors. In a summary of these findings, Rollins and Thomas report that competent behavior in children, both socially and personally, is positively correlated with parental support and inductive control attempts and negatively correlated with coercive and love withdrawal control attempts. However, the majority of these studies look at the control and support variables separately rather than measuring their joint interactive effects. The few empirical studies which treat both variables interactively indicate that the effects of parental control attempts are contingent on the level of parental support.

Furthermore, this research implicitly assumes that the socialization influence process is uni-directional (from parents to children) rather than reciprocal. Recently, however, researchers (Bell, 1968; Bank and Kahn, 1975) have pointed out limitations in this approach. They argue that the effect of children in the socialization of their parents is an important dimension, often overlooked in research on parent-child interactions. The continued interaction patterns established during the child's development may contribute to personality and adjustment capabilities of family members as well as direct parental influence. Advancement in this research area could be achieved by using
a systems approach which looks at the mutual and ongoing effects that members have on each other.

**Parental versus Peer Influence**

Considerable research has addressed the issue of the relative influence of parents and peers in adolescence. Even though the peer group becomes increasingly important during adolescence as dependence on the family decreases, the assumption of adolescent rejection of their parents may not be totally valid. Research in this area, however, reports contradictory evidence. Studies have shown both peer and family groups to be the overriding influence on the attitudes and behaviors of adolescents. One body of research argues that peers exert the greater influence (Brittain, 1963; Coleman, 1961) while the other view finds the family as the dominant influence during adolescence (Douvan and Adelson, 1966; Myeroff and Larson, 1965).

In order to help clarify this controversy, several issues need to be addressed. First, recent studies have demonstrated not only considerable overlap between parental and peer influence (Conger, 1971), but also that the relative importance of each depends to a great extent on the adolescent's perception of either one's value in a particular situation (Conger, 1977; Elder, 1975; Larson, 1972). For example, peer influence is more likely to dominate in such areas as music, fashions, and patterns of peer interactions while parental influence is seen in the areas of moral and social values. Thus, influence of
parents or peers is not an either-or issue; both serve as influential agents in varying degrees in different areas.

Secondly, when the peer group does exert a dominant influence on an adolescent's life, studies have shown that this influence reflects a lack of attention and support within the family rather than an inherent attraction to the peer group (Condry and Siman, 1974). Larson (1972) conducted a study to assess the role of the family in the process of social influence during adolescence. He found that the quality of the parental-adolescent relationship was the essential determinant of adolescent attitudes and behaviors. The nature of this parent-adolescent "affect" dimension was described as a cluster of family support factors: marital satisfaction, egalitarian authority, little difficulty in communication, frequent family interactions, and the absence of marital conflict. When peer preferences were dominant, the most efficient predictors were found to be a cluster of family control techniques: low adolescent-parent affect, difficulty in communication with parents, marital conflict and infrequent family interaction. Moreover, adolescents who experienced high parent-adolescent affect had less difficulty than those reporting low affect in seeing a need to distinguish between the influences of parents and their friends.

These studies reveal, then, that the influence of the family and the nature of its structure and process remain important factors even in adolescence. Kandel and Lesser
(1972) represent this viewpoint by stating "subjective peer orientation and reliance upon peers for advice and guidance are less related to the extent of adolescents' interactions with peers than to the nature of relationships with parents" (p. 127). However, the family system and patterns of interaction need to be identified and analyzed using a family systems of analysis to determine the role structural factors play in adolescent development.

Summary and Evaluation of Research on Structure and Power

In summary, this literature illuminates the importance of structure and power in the family system. Although concerned primarily with a descriptive analysis of different types of family structures and power relationships in a static fashion, the theoretical frameworks discussed provide a useful means for organizing ideas in order to understand family behavior in terms of underlying structures and patterns and its influence in relation to peer relationships. The next section presents research which focuses specifically on structures and processes in the family system which give rise to psychological disorders. This literature deals with the family as the unit of analysis and seeks to describe and analyze its functioning in clinically observable terminology. In order to gain a greater understanding of the family's role in psychological disorders such as adolescent depression, this focus on ongoing family interactions in relation to psychology health
Family Therapy Research

As an approach to individual problems, family therapy focuses on the dynamics of relationships among members in the family. It presents a radical departure from the traditional model of psychopathology. The family is treated as the unit of analysis instead of pathological tendencies within the individual. The interest of family therapists is on the observable, ongoing patterns of individual families as they relate to the psychological well-being of its members. The prevailing emphasis centers on the family as a system. All members of the family are seen as involved in the development, maintenance and modification of family patterns, both adaptive and maladaptive.

The emphasis on the impact of family interaction originated when researchers found that the family plays an important role in the prevention and development of schizophrenia (Doane, 1978). Although differing in vocabulary and specific focus, the concepts and theories first proposed have the same underlying premise, namely, that schizophrenia can be best understood as the result of certain patterns of family interaction. A review of this literature (Broderick and Pulliam-Krager, 1979) reveals that much of the early research was directed at identifying types of communication styles which contributed toward schizophrenia. These theories are presented below.
Early Research

The common theme across these theories is the presence of paradoxical pressure in the family. Bateson, Jackson, Haley and Weakland (1956) introduced the double-bind hypothesis to describe paradoxical communication patterns often present in families of schizophrenics. A double-bind situation exists when two logically inconsistent messages are communicated within a significant interpersonal relationship. A third message is also implicitly expressed, namely, an injunction against commenting about this inconsistency. Over time, an individual caught in this paradoxical communication is said to become confused over what is real and what is not, what is acceptable behavior and what is not. The individual can manifest schizophrenic symptoms such as withdrawal. No escape from this perverse family system seems possible, and it is assumed that the individual never develops a stable and autonomous identity.

The same paradoxical pressures are also involved in Wynne's concepts of pseudomutuality and pseudohostility (1958). Families with established patterns of interactions described as "pseudomutual" are unable to allow its members to achieve autonomy and independence as individuals. Any movement towards personal identity is seen as a threat to the family system as a whole. Thus, to avoid conflict, a pathological emphasis on relating and responding to the needs of the family exists in their communication patterns of interaction. Pseudohostility, on the other hand, refers
to family relationships existing in perpetual conflict in order to maintain an underlying overrelatedness and bonding among its members. When pseudomutual or pseudohostile interaction patterns become fixed, individual members can experience severe problems in identity formation, disturbed perceptual and communication modes of relating and overwhelming feelings of meaninglessness and emptiness, which are recognized symptoms of acute schizophrenic behavior.

Another form of paradoxical pressure occurs when a child is trapped in a parental power struggle. Lidz and others (1965) use the concept of schism to describe disturbed marital relationships characteristic of schizophrenic families. In his theory, parents are seen as important role models for a child's identity development. When the husband and wife are unable to establish reciprocal roles in the family system or become overly attached to the home, tension develops in the family. This tension is communicated to the child who consequently becomes confused about his/her identity and is unable to function in a healthy, self-reliant fashion. This pattern describes a marital schism which occurs, according to Lidz, when parents' irrational beliefs about appropriate roles to fulfill in the family are transmitted through distorted and rigid communication modes to the child.
Contemporary Research

Family therapists have expanded their clinical work beyond schizophrenia to include numerous emotional and behavioral problems. The unifying theoretical framework is systems theory, although it differs somewhat from the general systems theory orientation used in sociological research. The focus is on understanding the dynamic properties of family interaction in relation to both normal and disturbed functioning. In fact, several family systems theories have emerged in recent years, specifically, the communications-oriented therapy of the Palo Alto Group (Jackson, 1965), the Family Systems Theory of Bowen (1961, 1966, 1976), the eclectic communications theory of Satir (1967, 1972), the strategic therapy of Haley (1963, 1971, 1976) and the Structural Family Therapy of Minuchin (1974). These theories will be summarized below.

Jackson, the leading communications therapist, describes a family as an ongoing interactional system characterized by the patterns of relationships formed. These relationships are established through communication, both verbally and nonverbally. Jackson (1965) conceptualizes all behavior as communication because it conveys not only content but also how one person relates to another. He has argued that relationships are determined primarily by how the communication is said not what is said. Over time, these relationships stabilize and form the rules of a family system.
When a family is first formed, the marital couple establishes initial rules which are then passed onto the children. A family system functions adaptively when these rules are maintained. According to Jackson, pathological behavior occurs when such rules are violated and the family balance is upset. The way in which such disturbances occur is through various kinds of pathological communication. Jackson describes these pathological communications in terms of confused communication sequences (similar to the concepts of pseudomutuality and pseudohostility) and paradoxical communications (e.g., the double-bind hypothesis). According to Jackson, then, the sources of individual or family problems lie in an unbalanced family system and disturbed lines of communication.

Murray Bowen (1961, 1966, 1976) focuses on the emotional aspects of the family system. In his work with schizophrenic families, he found that their interactions were characterized by an emotional "stuck-togetherness." During development, such families were unable to allow their members to achieve autonomy and independence apart from the family. He describes this quality as an undifferentiated family ego mass which can be viewed as a form of paradoxical bonding within the family. A key aspect of his theory is the differentiation of self. If an individual cannot separate oneself emotionally from the family, his/her identity becomes fused with others, and establishing individuality is difficult.
Bowen expanded his concept of undifferentiated ego mass into a theory (Family Systems Theory) which views the family as an emotional relationship system. He conceptualizes the family as a series of interlocking subsystems or triangles. In relating to one another over time, two-person dyads typically bring a third person into their interactions, especially in stressful situations. The stability of these triangles and thus of the family depends on the level of differentiation each member has achieved. If an individual has not been able to develop a sense of autonomy and individuality, he/she becomes fused into the triangle, and emotional upset and pathology can result. Bowen sees this undifferentiation of self as developing over many generations. Individuals are likely to choose marriage partners at the same level of differentiation. The marital couple then transmits their emotional problems to the children who are then caught in an inappropriate emotional bonding. The emotional system is perpetuated over many generations. Bowen thus believes that emotional disorders can best be understood by looking at the historical context of the family and incorporates a multi-generational analysis in his clinical observations and therapy.

Satir (1967, 1972) a communications therapist, also stresses the emotional aspects of the family, but she emphasizes the role of communications to a much greater extent than Bowen. Based in large part on Jackson's conceptualizations of the family as an interactional system,
Satir focuses on the feeling aspect rather than the cognitive approach used by Jackson. Like Bowen, she views the dysfunctional individual as unable to separate him/herself from the family mass. Satir states that this inability arises from faulty communication patterns in the interactions between parents and children. If a child's emotional and physical needs are not met because of inadequate communication, he/she develops a poor self-concept and finds it difficult if not impossible to achieve adequate growth and independence. Oftentimes, this faulty communication is due to the rules established in families concerning the expression of one's needs and feelings. If these rules, unwritten and subtle, constrict individual members or create confusion on how to relate to each other, the family system is disturbed and pathology can result. Satir thus emphasizes the emotional aspects of familial experience; if communications are hurtful, the child's personality is stunted and disturbances occur.

**Family Structural Perspective: Minuchin and Haley**

The theoretical basis for the family structural perspective comes directly from the theories of family structure and organization formulated by Minuchin (1974) and Haley (1963, 1971, 1976). Before discussing these theories in detail, the theories and concepts presented thus far need to be evaluated in order to demonstrate the usefulness of Minuchin and Haley's formulations to this study. A major disadvantage of the systems theories of family therapists
and of the sociological system perspective is the relatively high level of abstraction used by these theorists to describe their concepts. A concentration on the overall interrelationships and interdependency operating in the family system proves to be difficult to operationalize and define without specific and concrete patterns identified. The structural theories of Minuchin and Haley, on the other hand, introduce concepts which are concrete in nature. In addition, although clinically rather than empirically based, these theories contain aspects of both research traditions discussed above (i.e., research on structure and power in the family and family therapy research) and provide a clear and straightforward analysis of family interaction and its relation to individual problems.

A family system is assumed to function effectively when the members support each other's needs for nurturance and a sense of belonging and also respect each other's need for autonomy. According to Minuchin and Haley, the ability of the family to function effectively depends on the nature of the family's structure and organization.

Minuchin views the family as a self-perpetuating system which revolves around the support, maintenance and socialization of its members. As the family grows and develops, patterns of interaction are established among members which dictate "how, when and whom to relate" (p. 54). These patterns constitute the structural and organization system of the family and reflect its
interpersonal transactional patterns occurring over time.

Minuchin describes the development and maintenance of the family according to these transactional patterns. When a family is formed, new patterns of interaction must be established. Couples must accommodate to each other's behavioral styles and to situations outside the family in a reorganized way. When children enter the picture, the family must restructure again with new patterns developed to socialize the children and to maintain cohesiveness of the family group while preserving each member's individuality at the same time. The thrust of Minuchin's model is toward the family structure existing through subsystems. These subsystems are generally dyads which are formed by generation, sex, interest, or function and aid toward regulating and organizing the way family members interact with one another. Over time, the family system must face a number of new situations occurring both within the family (e.g., birth of a child, adolescence, divorce) and outside the family (e.g., economic pressures, job transfer). The ability of the family to adapt to these changes depends on subsystems which are clearly defined yet flexible and a sufficient range of transactional patterns available.

According to Minuchin, three types of subsystems exist within a family system, each with specific functions. The first to develop is the spousal subsystem which begins when a couple marries, breaks ties with their families of origin and forms a complementary and mutually supportive
relationship. Here, the husband and wife must learn to accommodate to each other's needs and establish reciprocal roles within the subsystem. Minuchin's emphasis on the importance of a stable marital relationship reflects a similar focus by Lidz in his conceptualization of an adaptive family system.

The parental subsystem develops with the entrance of children into the family. Spouses must learn to exert their authority, provide nurturance and adequately socialize their children. The issue of parental practices in performing these functions is crucial to the effective functioning of this subsystem. The types of control attempts and support behaviors parents employ can affect the child's development and personality and impact on the whole family system. In addition, the way in which parents communicate these support and control behaviors to their children could adversely affect the children, according to communication family therapists. Moreover, support must be given from both parents, an important aspect of parental behavior cited previously (cf, Lidz, 1965; Caplow, 1968).

The sibling subsystem develops with the birth of the second child. Children learn to cooperate, compete and compromise with each other and to parental demands. Although often overlooked in family interaction research, the sibling subsystem does contribute to the functioning of the family system. Both siblings and parents can benefit from the adequate support and maintenance of this subsystem.
Siblings can develop their own identity, increase their solidarity, negotiate with parents from a better position and mediate conflicts with parents (Bank and Kahn, 1975). However, when parents do not allow the sibling subsystem to develop fully, increased tension can occur both within and across subsystems. This example illustrates the need for interdependency of all three subsystems within the family.

In order for the family to function effectively, boundaries between these subsystems need to be sufficiently flexible, elaborate and stable to maintain the continuity and adaptability of family functioning. Minuchin describes boundaries as the rules which define who participates in the subsystems and how members of subsystems interact with one another. These boundaries evolve from the patterns of transactions established, and they function in order to allow members to maintain their individuality, the identity of the subsystems and the family identity as a whole. Thus, the boundaries describe the patterns of behavior which Minuchin defines as "structures."

The clarity of these boundaries (structures) serves as an indicator of effective family functioning. Boundaries can range on a continuum from rigidity (disengagement) to diffuse (enmeshment). In other words, families with diffuse structures lack autonomy and the ability to differentiate each member's identity and relationships within the family while rigid structures result in a lack of cohesiveness which precludes interaction and communication. Minuchin's
concept of enmeshment is similar to the concepts describing disturbed interactions cited in the family therapy literature and certain family structures described in the family sociological research. Specifically, the concepts of pseudomutuality (Wynne, 1958), connectedness (Hess and Handel, 1959) and consensus-sensitive (Reiss, 1971) address this issue of an inability to achieve identity and independence within the family.

Although Haley does not discuss the development of family structure and organization to the extent that Minuchin does in his theory, his discussion of family organization reflects many similarities to Minuchin's formulations. While Minuchin describes family structures in terms of subsystems and boundaries, Haley uses the concepts of hierarchy and coalition formation to explain a family organizational system.

Haley views the family organization in terms of a hierarchical structure. The most common form of this hierarchy is the generational lines that form between parents and children. To maintain this hierarchy, family members must establish rules of relating which clearly delineate individuals primary and secondary in status and power. The parents naturally assume the superior position as they provide the guidance and support that the children require, and the children remain secondary in status and power. This hierarchical organization parallels the notion of boundary in Minuchin's theory. Both concepts refer to
the way in which patterns of interactions are organized within the family. Haley's notions of hierarchy, status and power also reflect the concepts in general systems theory (GST) and sociological research on structure and power presented above.

According to Haley, a family organization is dysfunctional when the hierarchical structure and status positions are confused. He states that this confusion results from coalitions which form across hierarchical lines, especially when these coalitions are not overtly manifest. Minuchin's concept of boundaries again helps to explain how this confusion could occur. If the generational lines are diffuse, interactions among individual members and the functions prescribed in each subsystem are unclear and could cause potential problems in family functioning.

When structures maintain a balance between the extremes of rigid and diffuse boundaries, and hierarchical lines are clear, the family is said to be functioning adaptively. However, extremely diffuse or rigid structures and cross-generational coalitions signal a dysfunctional system which, according to Minuchin and Haley, underlies individual and family problems. Both theorists specify a number of structural examples based on their clinical observations and therapeutic interventions. For purposes of this study, the dysfunctional structures pertaining specifically to the adolescent seem most relevant to investigate. A discussion of these structures, identified as scapegoating,
ineffective-parenting, parental child, ineffective parent-child interactions and lack of support and their origin are presented in more detail below.

1. Scapegoating When marital conflict exists (occurring in the spousal subsystem), often times parents use scapegoating practices as a means of conflict resolution. If the couple cannot resolve their disagreements within the spousal subsystem, they may divert their conflict onto the child so as to maintain their relationship, at least on the surface. The attention shifts away from problems in the marital relationship and focuses on the problem behaviors of the child. The child is thus labeled as the problem in the family, which can lead to psychological and behavior problems. It is unclear as to why a particular child is singled out; according to clinical observations, it could be the most vulnerable child chosen for attack or the child who is most disruptive. In many families, this structure results in the child becoming alienated from the family, receiving little support from either parents or other siblings, and forced to find support outside the family. The nature of this support could lead to additional problems if the child forms relationships with delinquent peers.

2. Ineffective parenting Not only do problems in the spousal subsystem result in dysfunctional structures, but the inability of parents to function effectively in the parental subsystem also signals possible family
dysfunctioning. When parents do not adequately share in parenting responsibilities, the parental subsystem is seen as inadequate. Oftentimes this problem is observed in families with a "distant father" and a mother who is "overinvolved" with her children. Minuchin describes this type of father as emotionally distant from the family and generally uninvolved in parenting a child (e.g., discipline, support, guidance, affection). The mother typically has little marital satisfaction and few interests outside the home so she invests an inordinate amount of time and energy into parenting. Although marital conflict is not necessarily a result of this structural arrangement, the child can be adversely affected if continued difficulties lead to maladaptive transactional patterns and development of dysfunctional structures such as an inappropriate parent-child coalition between the mother and child.

3. Parental Child A possible consequence of ineffective parenting is the parental child structure. Because of a distant or missing parent, one child can be inappropriately assigned to assume some of the parenting behavior and thus forms a rigid coalition with one parent. This can result in the parental child being unable to function as a child with his/her attendant needs, a coalition in the sibling subsystem formed against him/her, or the possible scapegoating of other children by the involved parent. The parental child becomes "caught" between the parental subsystem and the sibling subsystem,
4. Ineffective parent-child interaction Conflict between parents and children can also result in maladaptive family functioning. When arguments in the family violate normative subsystem roles, interactions among family members become dysfunctional. For example, parents and children who frequently use yelling and screaming as the means of communication with each other come to establish behaviorally maladaptive patterns of relating. This structure could very well lead to or interact with scapegoating practices of parents or alienation of children from parental values and expectations. Furthermore, Minuchin and Haley see these patterns as evolving in a reciprocal fashion rather than as influence attempts solely exerted by the parents, as suggested by the traditional child development research approach.

5. Lack of support In addition, the amount of support exchanged between and within each subsystem can provide further indicators of dysfunctioning. For example, a scapegoated child may be attacked because he/she receives little or no support from either parents or other siblings; ineffective parenting behavior could indicate a lack of support to children or between parents which could lead towards one child assuming some of the parenting role.

With regard to this study's focus on adolescence, Minuchin addresses the potential problems that can arise due to pressure within the family when children reach this
developmental stage. He believes that in order for a family to function adaptively, members should be able to form new relationships, new rules and new lines of differentiation to accommodate an adolescent's developmental changes. It is a period which can potentially cause abnormal stress on the family system if transactional patterns are not sufficiently flexible. For example, Minuchin sees the following changes as commonly occurring during a child's entrance into adolescence: the relationship between parents and the adolescent, participation in extrafamilial relationships, and adjustments in the sibling subsystem so that the adolescent can achieve his/her appropriate independence and responsibility. If boundaries are not clear or if rigid transactional patterns have been established, problems can occur. Specifically, the mother might react against changing the relationship with her "adolescent" for fear that it could endanger her relationship with her husband, i.e., the spousal subsystem or the parental subsystem. As a result, the mother may lash out against her child and disallow any independence displayed rather than working on developing alternative transactional patterns with her husband and child. In addition, if the father takes the child's side in these disagreements, an inappropriate parent-child coalition can be established, a dysfunctional structure according to both Minuchin and Haley. In fact, Minuchin reports that a rigid parent-child coalition structure and the maladaptive interaction patterns
established from continual conflict between parents and children are two structures often seen in families with disturbed or problem adolescents.

**Summary and Evaluation of Family Structural Perspective**

Thus, Minuchin and Haley present specific structures observed in family therapy situations which are characteristics of disturbed families. These structures are described in terms of family members' behaviors and experiences. Because these structures are defined in a behavioral sense, this approach lends itself to an empirical investigation of family functioning in a non-clinical setting. In addition, we see that this perspective speaks to the emotional aspects emphasized by other family therapists. For example, when family members do not support each other adequately, the interaction patterns established imply an emotional as well as a behavioral disengagement. Similarly, interaction patterns whose boundaries are described as enmeshed include overinvolvement among members in both a behavioral and emotional sense.

In summary, the theories of Minuchin and Haley represent a structural perspective on family interaction, integrating aspects of sociological research on structure and power in the family, social psychological investigations on coalitions, developmental studies of parent-child relationships and peer-parent influences, and family therapy research on the family's role in psychological and behavioral disorders. An understanding of the nature of
effective family functioning and its influence on individual adjustment and behavior, specifically adolescent depression, is a complex undertaking. However, this structural approach provides a viable framework within which advances in such an understanding can be achieved.
II. GENERAL GOALS

The overall purpose of this study is to investigate the association between clinically identified family structures and adolescent depression in certain family environments. Given a large sample of respondents from the high school population, 1) will the dysfunctional family structures observed in clinical settings be empirically verified in non-clinical environments, and 2) if so, what is the relationship between these structures and adolescent depression? A study conducted by Arnold (1980) to investigate the relationship between family structures and adolescent outcomes, in fact, demonstrated that certain family structures described by Minuchin and Haley were not limited to the clinical setting, but rather were observable patterns of interaction which could be assessed in varying degrees among non-clinical populations.

Arnold's major findings revealed the scapegoating family structure to be highly associated with several negative adolescent outcomes. Specifically, scapegoating practices were significantly related to a decrease in social support from the family and in self-esteem and increases in delinquent behavior, peer involvement, delinquent peer involvement and depression. Arnold, however, cautioned
against overgeneralization of these results based on two factors: 1) the use of college students as a sample which may have represented a more successful group of individuals than exists in the general population, and 2) the use of retrospective reports in assessing family structure during adolescence which may have distorted the accuracy of the self-report measures.

Nonetheless, this study was the first to attempt an assessment of family structures in a non-clinical setting. Based on these results, the present study focuses on the specific outcome of adolescent depression in a high school population and utilizes behavioral assessments to delineate more clearly the relationship between family structure and the psychological disorder of depression in adolescents.

The application of a family structural perspective to the study of adolescent depression represents a new direction in this area of research. The traditional view of loss as a precipitating factor in the occurrence of depression is reconceptualized from a family structural analysis. Specifically, this view sees dysfunctional structures as constituting a chronic loss in adaptive support and maintenance functions of the family. This type of loss is likely to impact on family members' psychological development. In fact, Arnold found a significant relationship between scapegoating and depression in college students in his study. This finding can be interpreted from a family structural perspective. A child who does not
receive support from either parents or siblings may become the victim in family arguments and be blamed for the problems occurring. As a result, the child no longer has supportive interactions with other family members. Feelings of alienation, worthlessness and a negative self-image, typical of depressive tendencies could easily arise in an adolescent whose family has established such structures. It is hypothesized that other structures may also be related to adolescent depression. For example, individuals in families who have adopted destructive patterns of communicating with one another may also adopt destructive ways of dealing with other people or themselves. These behaviors could result in depressive feelings in the adolescent. depressive feelings.

The focus of this study is thus on the association between established behavioral interaction patterns of families and reported depressive tendencies in adolescents. It is important to note here that this study is designed to describe associations rather than to predict causal relationships. It is recognized that the antecedents of adolescent depression are complex and multiple in nature. Family influence is not proposed as the sole causal factor. Nonetheless, based on the large body of research which points generally to the family as a crucial influence in the adolescent's psychological sense of well-being and upon specific studies which identify family structure as an important factor here, it is assumed that such associations between family factors and depression will be demonstrated.
Additionally, this study attempts to clarify the symptoms and behaviors associated with depression in adolescence. Although the question of what symptoms constitute the depressive syndrome cannot be resolved in one study, progress in identifying characteristics may be accomplished with a large sample. This study includes measures of both depressive feelings and behavioral signs of depression in an effort to identify the adolescent depressive syndrome. In light of previous research citing delinquency as a frequent manifestation of depression in adolescents, delinquent activities are also assessed. At the very least, incidence rates of these symptoms and behaviors can be reported in a large non-clinical population.

To gain a better understanding of the phenomena of depression in adolescence, this study also investigates the association between depression and relationships with peers. Because adolescence is a time when peer involvement increases, the amount and nature of this involvement is assessed to ascertain whether or not peer relationships are affected by how the adolescent feels and behaves. Results of these associations can then contribute to a delineation of factors other than family influence which are associated with depression in adolescence.
III. METHOD

Sample

A questionnaire designed by the author was administered to a sample of 358 high school students from three high schools in the southern New Hampshire area. The rationale for targeting the high school population was twofold. First, surveying respondents who resided with their family at the time of the survey enabled perceptions of family structures undistorted by long-term recall. Secondly, this age group represented the period of adolescence when depression typically occurs.

It was hoped that a roughly equivalent number of students could be sampled by high school, grade, and sex. Due to constraints imposed by participating schools in terms of available sample selection and by the voluntary nature of the survey, the author was unable to select equivalent groups on these dimensions. Thirty nine students from Newmarket High School, 146 students from Dover High School, and 173 students from Somersworth High School participated in the survey. Females comprised 56% of the sample (n=199) and males 44% of the sample (n=159). Their ages ranged from 13 to 18 with a mean age of 16.1 years. Seventy-six percent of the respondents were living with both parents at the time
of the survey, 13% were living with one parent and a step-parent, 10% were living with one parent only, and 1% were living with someone other than their parents. Thirty percent of the subjects were firstborn, 33% secondborn and 32% were the youngest in their family with 5% of the sample being the only child. The education level of fathers ranged from no high school (9%) to a post B.A. level (5%) with 37% of fathers having a high school degree and 22% with some college education. For mothers, educational level ranged from no high school (7%) to a post B.A. level (4%) with 51% having finished high school and 14% with some college education. In 153 of the cases (43%), the father was employed as a skilled worker, 17% were employed in sales positions or owners of a business, 4% were unemployed, 10% were unskilled or semiskilled workers and 23% were employed as professionals. Twenty-seven percent of the mothers were unemployed, 21% unskilled or semiskilled workers, 16% skilled workers, 21% in sales positions or owners of a business and 14% professionals.

Procedure

Initial contact was made with six high schools in southern New Hampshire (in the towns of Dover, Durham, Exeter, Newmarket, Rochester, and Somersworth) to insure participation of three schools in the survey. Three schools were included to help minimize any systematic bias of one school or its surrounding area. Telephone calls to each principal were followed up by a letter describing the scope
of the school's involvement in the survey, a proposal to familiarize the principals with the rationale and purpose of the study, and a copy of the questionnaire to be administered. Of the six schools contacted, Dover High School, Newmarket High School and Somersworth High School agreed to participate. Individual meetings with each principal were then held to discuss sample selection and questionnaire administration. At Dover and Newmarket High Schools, the author was able to sample from study hall periods only. At Somersworth High School, 15 classes (five from each grade level) were made available for survey participation.

The procedure for administration of the questionnaire was similar for the three high schools. The author visited the classroom/study halls first to explain the study and distribute parental and student consent forms. Participation of the students was voluntary contingent upon returning both consent forms signed. Subsequently, the author returned to administer the questionnaire to those participating in the study. It was made clear to the students that their responses were totally anonymous. The questionnaire required less than a class period to complete; students took between 20 and 35 minutes to fill out the survey. The author remained in the classes to answer any questions and to collect the completed questionnaires. Questionnaire administration took approximately a week and a half at each school. Data collection was completed in four
weeks.

**Instrument**

The questionnaire used in this study contained 158 questions designed to meet operational definitions of the family structures, peer relationships, and depression indicators described above (See Appendix A). The questionnaire was based on the Adolescent Life Experiences Questionnaire (ALEQ) developed by Arnold (1980). However, the ALEQ was revised substantially for this study to operationally assess the family structures in a behavioral sense and to expand the section on depression. Specifically, questions measured the frequency of events or situations occurring and response categories were formatted in seven point scales ranging from "never" and "less than once a month" to "every day" for family structure, peer relationship and depression items and a range of "never" and "one to three times a year" to "once a week or more" for delinquent items.

**Family Structure items**

Questions on family structures were revised to operationally indicate: 1) amount of support and closeness among family members, including such items as "how frequently did you spend time with your mother (father, brother/sister, friend) in the past year doing things together that you both enjoy", "how frequently did you talk about problems at school with your mother (father, brother/sister, friends) in the past year", "how frequently
did you receive physical affection from your mother (father, brother/sister, friends) in the past year", etc.; and 2) the nature and degree of structural unclarity or confusion in the family system (scapegoated child, parental child, ineffective parenting, ineffective parent-child interactions), including such items as "how frequently did you and your parents argue in the past year", "how frequently were you blamed for causing these arguments", "how frequently were you held responsible for a younger sibling's behavior", etc.

**Depression items**

For the assessment of depression, several measures were employed. Since research findings have demonstrated that adolescents manifest symptoms similar to the adult depression syndrome, the short form of the Beck Depression Inventory (Beck, 1974) was included. This inventory is a clinically derived self-report measure designed for use in adult psychiatric populations and constructed to assess the current level of depression. Thirteen items cover affective and motivational areas of depressive symptomatology. Possible scores range from 0-39, with scores of 0-4 being characterized by Beck as "not depressed", 5-7 as "mildly depressed", 8-15 as "moderately depressed", and 16-39 as "severely depressed." Although the BDI was developed to assess adult depression, it has been used successfully with college and older adolescent populations (Beck, 1975; 1980; Eumberry, 1978). The BDI has been used as a criterion
measure in over 100 published studies (Beck and Beck, 1973) and evidence has shown it to be a valid indicator of the presence of the clinically defined depressive syndrome.

In addition, questions were constructed to measure behavioral signs associated with adolescent depression. Seven measures were behaviorally assessed: frequency of crying spells, no appetite, trouble sleeping, being tired, physical complaints, trouble with schoolwork, and spending time alone over the past year.

Because adolescent depression often manifests itself in delinquent behavior, questions relating to delinquent activities were also included. A sample of questions was adapted from the Delinquency Check List (Stein, 1968) to behaviorally assess the frequency over the past year of status offenses (e.g., running away from home, skipping school, having physical fights with others), alcohol use, and delinquent acts (e.g., stealing, carrying a phony identification card and smoking marijuana).

**Peer Relationship Items**

Questions were also constructed to behaviorally assess the amount and nature of relationships with peers. These questions concerned extracurricular activities with friends (including such items as "how frequently did you go to school events with friend in the past year", "how frequently did you have friends over to the house in the past year", etc) and indications of status offenses, alcohol use and delinquent behavior by friends identical to those directed
at the adolescent's own behavior.

**Demographic items**

In addition, demographic information descriptive of the subjects themselves and their parents was collected (e.g., subjects' age, sex, religious orientation; parents' occupation, education, income, and religious orientation) plus family composition information (e.g., birth order; number, age and sex of siblings).
IV. RESULTS

Overview

This section provides an overview of the analysis procedures performed on the data. Because this study was exploratory, analysis techniques were directed at assessing the incidence of, and association between, family structures and adolescent depression rather than at predicting causal relationships. Toward this end, the data were organized and analyzed on several levels. The various items were assessed on both an individual and composite level.

Composite variables were formed to obtain a more manageable assessment of the data. Sets of questions were first conceptually grouped to indicate each family structure, a measure of behavioral depression, status offense activities, delinquent activities, peer relationships, status offense activities by friends, and delinquent activities by friends. Twenty-two composite variables were created with this procedure.

Each composite variable was then submitted to separate principal components analyses with varimax rotation to see if the composite variables represented single dimensions by loading onto single factors. The criterion for including a
composite variable in further analyses was that the
eigenvalue was greater than one, and the criterion for
including an item in a composite variable was that the
factor loading was greater than .40.

Table 1 presents the composite variables and the factor
loadings of the items which form each composite. These
results show that all twenty-two composite variables loaded
onto single factors with eigenvalues of greater than one.
The items which did not have factor loadings of .40 or
higher were dropped from each composite variable (i.e.,
those items not underlined in Table 1). This procedure
generally confirms in a statistical sense the conceptual
groupings of questions designed to measure family
structures, behavioral indices of depression, and peer
relationships.

Descriptive statistical techniques were conducted to
assess the reported incidence of the items and variables in
the sample with emphasis placed on the occurrence of family
structures and adolescent depression in a non-clinical
population.

Multivariate and univariate statistics were then used
to investigate the associations between family structures
and depression. Analyses on the composite level were
carried out to provide indications of general trends in the
data with analyses on the individual question level
conducted to reveal specific associations between family
interactions and adolescent depression.
<table>
<thead>
<tr>
<th>Factor Variables/Items</th>
<th>Loadings</th>
<th>Communality</th>
<th>Eigen Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. FAMILY STRUCTURES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1. Closeness to Mother</strong></td>
<td></td>
<td></td>
<td>1.50</td>
</tr>
<tr>
<td>Item A1&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.59&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.34</td>
<td></td>
</tr>
<tr>
<td>Item A6</td>
<td>.35</td>
<td>.12</td>
<td></td>
</tr>
<tr>
<td>Item A11</td>
<td>.64</td>
<td>.42</td>
<td></td>
</tr>
<tr>
<td>Item A16</td>
<td>.61</td>
<td>.38</td>
<td></td>
</tr>
<tr>
<td>Item A51</td>
<td>.48</td>
<td>.23</td>
<td></td>
</tr>
<tr>
<td><strong>2. Closeness to Father</strong></td>
<td></td>
<td></td>
<td>1.59</td>
</tr>
<tr>
<td>Item A2</td>
<td>.61</td>
<td>.47</td>
<td></td>
</tr>
<tr>
<td>Item A7</td>
<td>.25</td>
<td>.16</td>
<td></td>
</tr>
<tr>
<td>Item A12</td>
<td>.76</td>
<td>.79</td>
<td></td>
</tr>
<tr>
<td>Item A17</td>
<td>.58</td>
<td>.34</td>
<td></td>
</tr>
<tr>
<td>Item A52</td>
<td>.50</td>
<td>.27</td>
<td></td>
</tr>
<tr>
<td><strong>3. Closeness to Most Favorite Sibling</strong></td>
<td></td>
<td></td>
<td>1.23</td>
</tr>
<tr>
<td>Item A3</td>
<td>.52</td>
<td>.27</td>
<td></td>
</tr>
<tr>
<td>Item A8</td>
<td>.39</td>
<td>.15</td>
<td></td>
</tr>
<tr>
<td>Item A13</td>
<td>.51</td>
<td>.26</td>
<td></td>
</tr>
<tr>
<td>Item A18</td>
<td>.69</td>
<td>.46</td>
<td></td>
</tr>
<tr>
<td>Item A53</td>
<td>.29</td>
<td>.10</td>
<td></td>
</tr>
<tr>
<td><strong>4. Closeness to Least Favorite Sibling</strong></td>
<td></td>
<td></td>
<td>1.24</td>
</tr>
<tr>
<td>Item A4</td>
<td>.73</td>
<td>.53</td>
<td></td>
</tr>
<tr>
<td>Item A9</td>
<td>.36</td>
<td>.13</td>
<td></td>
</tr>
<tr>
<td>Item A14</td>
<td>.46</td>
<td>.21</td>
<td></td>
</tr>
<tr>
<td>Item A19</td>
<td>.47</td>
<td>.22</td>
<td></td>
</tr>
<tr>
<td>Item A54</td>
<td>.38</td>
<td>.14</td>
<td></td>
</tr>
<tr>
<td><strong>5. Support from Mother</strong></td>
<td></td>
<td></td>
<td>3.40</td>
</tr>
<tr>
<td>Item A21</td>
<td>.73</td>
<td>.54</td>
<td></td>
</tr>
<tr>
<td>Item A26</td>
<td>.78</td>
<td>.61</td>
<td></td>
</tr>
<tr>
<td>Item A31</td>
<td>.75</td>
<td>.56</td>
<td></td>
</tr>
<tr>
<td>Item A36</td>
<td>.85</td>
<td>.73</td>
<td></td>
</tr>
<tr>
<td>Item A41</td>
<td>.76</td>
<td>.58</td>
<td></td>
</tr>
<tr>
<td>Item A46</td>
<td>.83</td>
<td>.69</td>
<td></td>
</tr>
</tbody>
</table>
6. **Support from Father**

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A22</td>
<td>.71</td>
</tr>
<tr>
<td>A27</td>
<td>.75</td>
</tr>
<tr>
<td>A32</td>
<td>.79</td>
</tr>
<tr>
<td>A37</td>
<td>.84</td>
</tr>
<tr>
<td>A42</td>
<td>.76</td>
</tr>
<tr>
<td>A47</td>
<td>.88</td>
</tr>
</tbody>
</table>

7. **Support from Most Favorite Sibling**

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A23</td>
<td>.77</td>
</tr>
<tr>
<td>A28</td>
<td>.66</td>
</tr>
<tr>
<td>A33</td>
<td>.83</td>
</tr>
<tr>
<td>A38</td>
<td>.84</td>
</tr>
<tr>
<td>A43</td>
<td>.81</td>
</tr>
<tr>
<td>A48</td>
<td>.83</td>
</tr>
</tbody>
</table>

8. **Support from Least Favorite Sibling**

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A24</td>
<td>.64</td>
</tr>
<tr>
<td>A29</td>
<td>.68</td>
</tr>
<tr>
<td>A34</td>
<td>.84</td>
</tr>
<tr>
<td>A39</td>
<td>.78</td>
</tr>
<tr>
<td>A44</td>
<td>.79</td>
</tr>
<tr>
<td>A49</td>
<td>.80</td>
</tr>
</tbody>
</table>

9. **Marital Conflict**

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1</td>
<td>.85</td>
</tr>
<tr>
<td>B2</td>
<td>.91</td>
</tr>
<tr>
<td>B4</td>
<td>.75</td>
</tr>
</tbody>
</table>

10. **Ineffective Parent-Child Interactions**

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B8</td>
<td>.64</td>
</tr>
<tr>
<td>B12</td>
<td>.81</td>
</tr>
<tr>
<td>B13</td>
<td>.62</td>
</tr>
</tbody>
</table>

11. **Scapegoating**

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B6</td>
<td>.50</td>
</tr>
<tr>
<td>B14</td>
<td>.76</td>
</tr>
</tbody>
</table>

12. **Parental Child**

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>C7</td>
<td>.66</td>
</tr>
<tr>
<td>C8</td>
<td>.66</td>
</tr>
</tbody>
</table>
B. DELINQUENCY

13. Status Offenses 2.00
   Item D1 .52 .31
   Item D2 .43 .72
   Item D8 .31 .17

14. Delinquent Acts 1.39
   Item D3 .86 .73
   Item D4 .44 .20
   Item D5 .54 .29
   Item D9 .41 .17

15. Drinking Behavior 3.82
   Item D6 .85 .83
   Item D7 .89 .84

C. PEER RELATIONSHIPS

16. Closeness to Friends 1.42
   Item A5 .41 .17
   Item A10 .34 .12
   Item A15 .78 .61
   Item A20 .55 .31
   Item A55 .47 .22

17. Support from Friends 3.23
   Item A25 .64 .41
   Item A30 .61 .37
   Item A35 .81 .66
   Item A40 .83 .68
   Item A45 .77 .60
   Item A50 .72 .51

18. Activities with Friends 1.72
   Item E1 .43 .18
   Item E2 .79 .63
   Item E3 .67 .45
   Item E4 .67 .45
D. PEER INFLUENCES

19. Status Offenses by Friends 2.52
   Item E8  .56  .37
   Item E9  .51  .31
   Item E15 .52  .40

20. Delinquent Acts by Friends 2.84
   Item E10 .56  .52
   Item E11 .45  .36
   Item E12 .60  .40
   Item E16 .25  .45

21. Drinking Behavior by Friends 3.94
   Item E13 .85  .78
   Item E14 .85  .81

E. BEHAVIORAL INDICES OF DEPRESSION

22. Behavioral Depression 3.09
   Item F1  .67  .45
   Item F2  .56  .31
   Item F3  .61  .38
   Item F4  .59  .35
   Item F5  .70  .49
   Item F6  .58  .33
   Item F7  .48  .23
   Item F8  .74  .55

\a The letter refers to the section the item appears in the questionnaire. The number refers to the item within that section.

\b An underlined item denotes inclusion in the composite variable. Only those items with factor loadings of .40 or higher were included.
Analyses of variance on the composite variables showed that subjects did not differ in their responses according to the school attended. (See Appendix B1 for results of these analyses). Therefore, the data were collapsed over high schools and all analyses were performed on the sample as a whole.

Specific results are presented below. The first section provides descriptive results of the incidence of adolescent depression and family structures. Adolescent depression is described in terms of the clinical depression scale used (EEI). The frequency of behavioral indices of depression is also presented to demonstrate validity of the clinical depression scale. These two indices of depression are then statistically compared.

Descriptive results on the reported incidence of family structures are presented to validate the clinical descriptions and to assess the frequency of these structures in the sample. Following these descriptive results, specific associations among the variables and items are presented.

In the second section, the focus is on the outcome variable of clinical depression (BDI). Results of the multivariate analyses on the composite level are presented followed by results at the individual question level. Findings on the relationships between clinical depression and family structures are presented followed by the findings on associations between clinical depression and both
delinquency and peer involvement.

Incidence of Adolescent Depression and Family Structures

Incidence of Adolescent Depression

BDI Scores on the short form BDI inventory were classified according to the four categories devised by Beck (1974): severely depressed (scores of 16-39), moderately depressed (scores of 8-15), mildly depressed (scores of 5-7), and not or minimally depressed (scores of 0-4). Based on this method, 5.6% (n=20) of the high school sample fall into the range of severely depressed and 19% (n=68) into the moderately depressed range with 22.9% (n=82) classified as mildly depressed and 52.5% (n=188) as not or minimally depressed.

Table 2 presents means and standard deviations on the BDI for the total sample and by age levels and sex. A comparison of the total mean score for this sample with that from a study conducted by Terry (1973) of adolescents in high school shows a slightly higher level of depression in the present sample (5.38 vs 4.88, t(1,397)= .73, ns). However, a study by Beck and Beck (1975) with preadolescents and adolescents (ranging in age from 11 to 15 years) indicates a significantly higher mean score in younger adolescents than the score obtained on this sample 7.06 vs 5.38, t(1,407)=3.05, p < .01). Beck's findings of higher rates of depression in younger adolescents is supported in this study by comparisons of mean scores for different age groups given in Table 2. These data show an indication
Table 2
Means and Standard Deviations
on the BDI

<table>
<thead>
<tr>
<th></th>
<th>$\bar{X}$</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>5.38</td>
<td>4.89</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 (n=45)</td>
<td>6.18</td>
<td>4.71</td>
</tr>
<tr>
<td>15 (n=71)</td>
<td>5.97</td>
<td>5.84</td>
</tr>
<tr>
<td>16 (n=91)</td>
<td>5.26</td>
<td>4.87</td>
</tr>
<tr>
<td>17 (n=124)</td>
<td>5.27</td>
<td>4.64</td>
</tr>
<tr>
<td>18 (n=27)</td>
<td>3.44&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.23</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male (n=159)</td>
<td>4.43</td>
<td>4.07</td>
</tr>
<tr>
<td>Female (n=199)</td>
<td>6.14&lt;sup&gt;b&lt;/sup&gt;</td>
<td>5.36</td>
</tr>
</tbody>
</table>

<sup>a</sup>significant from 14 year olds, p<.01
<sup>b</sup>significant from males, p<.01
When mean scores for 14 year olds and 18 year olds are compared, the level of depression in 14 year olds is significantly higher than in 18 year olds (6.18 vs 3.44, \( t(1,69) = 2.66, p < .01 \)).

The comparison of mean BDI scores between females and males reveals a significantly higher level of depression in females than in males (6.14 vs 4.43, \( t(1,356) = 3.31, p < .01 \)). In addition, significantly more females (27%) than males (15%) reported moderate and severe levels of depression (chi square(3,358) = 9.74, \( p < .02 \)). These findings are consistent with previous research indicating that more adolescent females report depression than do adolescent males. Neither Beck in his study of preadolescents (1975) nor Bumberry in a study of depression in a college population (1978) reported significant associations between sex and depression ratings. However, both authors acknowledged that the nonsignificant findings most likely reflected the small sample size (Beck and Beck, \( n=63 \); Bumberry, \( n=56 \)) rather than actual incidence rates by sex.

**Behavioral Measures** Table 3 provides results from the behavioral measures of depression for the total sample and for the four levels of the BDI inventory in terms of frequencies of depressive symptoms reported as occurring at least weekly. This weekly percentage represents the collapsed categories of "one to two times a week", "three to
<table>
<thead>
<tr>
<th>Items</th>
<th>% overall (n=358)</th>
<th>% not depressed (n=188)</th>
<th>% mildly depressed (n=82)</th>
<th>% moderately depressed (n=68)</th>
<th>% severely depressed (n=20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1. cannot sleep</td>
<td>39.7</td>
<td>27.1</td>
<td>40.3</td>
<td>57.3</td>
<td>65.0</td>
</tr>
<tr>
<td>F2. no appetite</td>
<td>25.9</td>
<td>16.0</td>
<td>35.4</td>
<td>35.3</td>
<td>50.0</td>
</tr>
<tr>
<td>F3. crying spells</td>
<td>14.7</td>
<td>3.2</td>
<td>15.9</td>
<td>31.4</td>
<td>60.0</td>
</tr>
<tr>
<td>F4. tired</td>
<td>75.7</td>
<td>52.1</td>
<td>76.9</td>
<td>91.1</td>
<td>90.0</td>
</tr>
<tr>
<td>F5. physical complaints</td>
<td>29.4</td>
<td>21.3</td>
<td>33.0</td>
<td>39.7</td>
<td>55.0</td>
</tr>
<tr>
<td>F6. difficulty with schoolwork</td>
<td>39.1</td>
<td>34.4</td>
<td>35.4</td>
<td>56.0</td>
<td>80.0</td>
</tr>
<tr>
<td>F7. spend time alone</td>
<td>57.2</td>
<td>50.0</td>
<td>61.0</td>
<td>67.7</td>
<td>80.0</td>
</tr>
<tr>
<td>F8. experience depression</td>
<td>32.1</td>
<td>34.6</td>
<td>32.9</td>
<td>55.4</td>
<td>65.0</td>
</tr>
</tbody>
</table>
four times a week", "five to six times a week", and "every day". These findings indicate that six out of the eight behavioral measures of depression are reported in at least 30% of the sample on a weekly basis. The percentage of subjects reporting these measures increases across the four levels of the BDI (from not depressed to severely depressed) which lends credence to the validity of the BDI scale.

**Correlations between Depression Indices** Table 4 presents correlations between the BDI raw scores and each behavioral measure. The overall Pearson product moment correlation between the behavioral depression composite variable and the BDI is .58 (p < .001). These significant correlations indicate relationships between the BDI and behavioral measures of depression and provide empirical support for the reported relationships between cognitive and behavioral symptoms of depression in adolescents. In addition, this relationship is consistent with research reporting that adolescents often manifest depressive feelings behaviorally.

**Incidence of Family Structures**

**Verification** One of the goals of this study was to empirically verify the existence of clinically observed family structures identified by Minuchin (1974) and Haley (1976). As noted above, twelve composite variables relating to family structures were created (see Table 1). The first eight variables refer to the amount of closeness and support established among family members. The remaining four
Table 4
Correlations of Behavioral Indices of Depression with BDI

<table>
<thead>
<tr>
<th>F1. cannot sleep</th>
<th>r</th>
<th>(n=358)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F2. no appetite</td>
<td>.31***</td>
<td></td>
</tr>
<tr>
<td>F3. crying spells</td>
<td>.24***</td>
<td></td>
</tr>
<tr>
<td>F4. tired</td>
<td>.52***</td>
<td></td>
</tr>
<tr>
<td>F5. physical complaints</td>
<td>.27***</td>
<td></td>
</tr>
<tr>
<td>F6. difficulty with schoolwork</td>
<td>.36***</td>
<td></td>
</tr>
<tr>
<td>F7. spend time alone</td>
<td>.16***</td>
<td></td>
</tr>
<tr>
<td>F8. experience depression</td>
<td>.45***</td>
<td></td>
</tr>
</tbody>
</table>

***p<.001
variables (e.g., marital conflict, ineffective parent-child interactions, scapegoating, and parental child) describe structural confusion in the family system. These variables represent behavioral indications of the dysfunctional structures identified by Minuchin and Haley as maladaptive to family and individual functioning. Referring to Table 1, we find that the operational assessments used to measure each structure are statistically confirmed by the principal components factor analysis procedure. Each set of questions loads onto a meaningful factor. These findings indicate that the operational assessments coincide with the clinical descriptions of family structures.

Frequency of Family Structures The frequency of these structures in non-clinical families can be assessed by examining responses to individual questions making up these family structure composite variables. These responses are examined in relation to the dysfunctional structures previously identified (i.e., scapegoating, ineffective parenting, ineffective parent-child interactions, parental child, and lack of support).

The scapegoating structure was discussed as a possible consequence of marital conflict (i.e., when spouses cannot resolve conflict, they may divert it onto the adolescent, blaming him/her for the problems occurring). Therefore, the frequency of both the marital conflict and scapegoating items are relevant here. The frequencies of and correlations between these items are presented in Table 5.
Table 5

Descriptive Statistics and Correlations of Marital Conflict and Scapegoating Items

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Marital Conflict</th>
<th>Scapegoating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Less than 1-3 times</td>
<td>1-2 times</td>
<td>3-4 times</td>
</tr>
<tr>
<td>Never</td>
<td>monthly</td>
<td>a month</td>
</tr>
<tr>
<td>A. Marital Conflict Items</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. mother and father argue (Item B1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.6</td>
<td>25.7</td>
<td>20.1</td>
</tr>
<tr>
<td>2. mother and father argue in front of you (Item B2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.4</td>
<td>28.8</td>
<td>15.1</td>
</tr>
<tr>
<td>3. mother and father yell and shout at each other (Item B4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27.9</td>
<td>20.1</td>
<td>14.0</td>
</tr>
<tr>
<td>B. Scapegoating Items</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. blamed in marital arguments (Item B6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50.6</td>
<td>14.8</td>
<td>9.5</td>
</tr>
<tr>
<td>2. blamed in family arguments (Item B14)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36.3</td>
<td>20.4</td>
<td>15.9</td>
</tr>
</tbody>
</table>

*p<.001
In relation to marital conflict, an examination of the frequencies of these items reveals that 44.4% report marital arguments once a week or more, 36.4% report weekly marital arguments occurring in their presence, and 30.7% report that their parents yell or shout at each other during these arguments at least weekly. Scapegoating practices are also verified in non-clinical families. Over twenty-five percent of the sample report being blamed for marital arguments once a month or more (17.8% once a week or more), and 42.7% report being blamed for family arguments at least once a month (26.8% weekly or more).

The structure identified as ineffective parenting refers to the kinds and amount of supportive interactions between the adolescent and his/her mother and father. It was proposed that ineffective parenting would be demonstrated by a father who is "distant" and a mother "overinvolved" with the adolescent. This structure was assessed in terms of the items relating to parental support and spending time together. Table 6 presents the frequencies and correlations between these items. Looking at the parental support items, we find that supportive interactions are reported more frequently between the mother and adolescent than between the father and adolescent. Almost fifty percent of the sample report weekly supportive interactions with their mother in terms of discussing and being offered help with school, friend, and family problems. In relation to the father, generally only
Table 6

Descriptive Statistics and Correlations of Ineffective Parenting Items

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1-3 times</td>
<td>1</td>
</tr>
<tr>
<td>1-2 times</td>
<td>4</td>
</tr>
<tr>
<td>3-4 times</td>
<td>8</td>
</tr>
<tr>
<td>5-6 times</td>
<td>14</td>
</tr>
<tr>
<td>Every</td>
<td>20</td>
</tr>
<tr>
<td>Never</td>
<td>26</td>
</tr>
<tr>
<td>monthly</td>
<td>32</td>
</tr>
<tr>
<td>a month</td>
<td>38</td>
</tr>
<tr>
<td>a week</td>
<td>44</td>
</tr>
<tr>
<td>a week</td>
<td>50</td>
</tr>
<tr>
<td>a day</td>
<td>56</td>
</tr>
</tbody>
</table>

A. Support from Mother

1. talk about school problems (Item A21)
   - 10.3 9.5 15.1 21.2 19.3 11.9 13.1
   - Correlations: -.55* .55* .61* .55* .58*

2. help with school problems (Item A28)
   - 17.0 13.4 14.8 15.9 12.6 10.3 15.1
   - Correlations: -.51* .64* .57* .60*

3. talk about friend problems (Item A31)
   - 22.1 16.5 13.1 16.2 10.9 12.0 8.4
   - Correlations: - - - -.73* .48* .55*

4. help with friend problems (Item A36)
   - 22.6 15.4 11.5 16.2 11.2 9.8 11.7
   - Correlations: - - - - .55* .66*

5. talk about family problems (Item A41)
   - 17.6 10.1 16.2 19.0 14.0 11.2 11.2
   - Correlations: - - - - - .74*

6. help with family problems (Item A46)
   - 18.7 11.7 15.1 14.0 15.9 11.7 11.7
   - Correlations: - - - - - -
### B. Support from Father

1. talk about school problems (Item A22)
   - 19.8
   - 16.2
   - 19.0
   - 18.4
   - 10.3
   - 6.7
   - 6.1

2. help with school problems (Item A27)
   - 25.7
   - 14.8
   - 16.5
   - 15.6
   - 7.0
   - 7.8
   - 9.8

3. talk about friend problems (Item A32)
   - 40.2
   - 19.8
   - 10.6
   - 10.3
   - 6.1
   - 5.9
   - 3.6

4. help with friend problems (Item A37)
   - 36.9
   - 17.0
   - 10.9
   - 12.8
   - 7.3
   - 5.6
   - 5.3

5. talk about family problems (Item A37)
   - 28.2
   - 14.8
   - 14.2
   - 19.0
   - 7.8
   - 6.4
   - 6.1

6. help with family problems (Item A42)
   - 29.1
   - 15.6
   - 15.6
   - 12.3
   - 9.5
   - 6.4
   - 8.1

### Support from Father

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-.58*</td>
<td>.54*</td>
<td>.52*</td>
<td>.53*</td>
<td>.57*</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>-.53*</td>
<td>.64*</td>
<td>.52*</td>
<td>.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.72*</td>
<td>.51*</td>
<td>.57*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>.55*</td>
<td>.67*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>.74*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### C. Spend Time with Mother and Father

1. do activities with mother (Item A1)
   - 3.9
   - 7.5
   - 15.6
   - 24.3
   - 24.9
   - 10.6
   - 12.3

2. do activities with father (Item A2)
   - 7.5
   - 9.8
   - 19.3
   - 26.3
   - 13.7
   - 9.8
   - 10.6

*p<.001
a third of the sample reports weekly occurrences of these same types of interactions. Notice that the support in relation to problems with friends is lowest for both parents. In relation to spending time together, 72.1% report being involved with their mother at least weekly and 60.4% report being involved with their father or a weekly basis. These findings suggest only a slight indication toward the father being "distant" in the family and the mother being more involved with the adolescent.

The structure identified as ineffective parent-child interactions speaks to the kinds of interactions and nature of communication between parents and the adolescent. Table 7 presents the frequencies of and correlations between these items. The frequencies of weekly or more occurrences of ineffective parent-child interactions are fairly substantial, with over 40% of the sample reporting family arguments, 37.1% reporting that parents yell and shout during family arguments and 41.9% reporting that they yell and shout at their parents in such arguments once a week or more.

In relation to the parental child structure, almost 25% of the sample report being held responsible for a younger sibling's misbehavior on a weekly basis (see Table 8 for the frequencies of and correlations between the parental child items). However, technical deficiencies in assessment of birth order makes the reported frequencies difficult to interpret. The adolescents who do report these occurrences
Table 7
Descriptive Statistics and Correlations of Ineffective Parent-Child Interaction Items

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td></td>
</tr>
<tr>
<td>1-3 times</td>
<td>1. mother, father, you argue (Item B8)</td>
</tr>
<tr>
<td>1-2 times</td>
<td>2. mother and father yell and shout at you (Item B12)</td>
</tr>
<tr>
<td>3-4 times</td>
<td>3. you yell and shout at mother and father (Item B13)</td>
</tr>
<tr>
<td>5-6 times</td>
<td></td>
</tr>
<tr>
<td>Every day</td>
<td></td>
</tr>
</tbody>
</table>

*p<.001
### Table 8

**Descriptive Statistics and Correlation of Parental Child Items**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-3 times</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2 times</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-4 times</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-6 times</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Every</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Correlations</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. held responsible for younger sibling's misbehavior (Item C7)</td>
<td>22.9</td>
<td>.44*</td>
</tr>
<tr>
<td>2. older sibling held responsible for your misbehavior (Item C8)</td>
<td>53.1</td>
<td>-</td>
</tr>
</tbody>
</table>

* *p < .001*
may be the oldest child in the family. We cannot assume, then, that these reported behaviors are maladaptive in these families. Therefore, this structure and the items have been excluded from further analyses.

In general, these findings indicate that over one third of the sample report behavioral interactions representing dysfunctional structures on a weekly basis. In addition, these results demonstrate that these structures are present to some extent in all families. The relative frequency of these interactions being reported in families is thus the important factor, not whether or not the interactions are reported at all.

Based on ANOVAs of the composite variables, there were no sex differences in reporting the dysfunctional structures representing marital conflict, ineffective parent-child interactions, scapegoating or parental child. In addition, these structures did not differ significantly according to an index of socio-economic status (a combination of education and occupation of the father) or parental marital status (i.e., two-parent families, single-parent families, parent and step-parent families).

There was a significant main effect of sex on the support from mother composite variable ($F(2, 345) = 17.56$, $p < .001$). This finding indicates that females report talking to their mothers about various kinds of problems significantly more often than males do. Also, significant differences according to parental marital status were found
on the closeness to father composite variable ($F(2,345) = 4.87, p < .008$) and on the support from father composite variable ($F(2,345) = 9.44, p < .001$). This finding is most likely due to the absence of the father in single-parent families. The results of these analyses are found in Appendix B2.

**Associations with Clinical Depression**

**Multivariate Analyses on the Composite Level**

Multivariate analyses were performed first on the composite variables to obtain general indications of associations with clinical depression. Due to problems with missing data, the statistical programs of profile analysis, MANOVA, and multivariate could not be conducted on the composite variables. Therefore, a stepwise multiple regression analysis was carried out on twenty variables (without the behavioral depression and parental child composite variables) to show relationships with clinical depression. Inspection of the correlation matrix revealed multi-collinearity among the variables. When problems of multi-collinearity exist, two solutions are suggested (Johnston, 1972): 1) create higher-order composite variables of the intercorrelated variables and use these in the regression equation, and 2) remove the redundant variables and conduct the regression analysis on the remaining subset of variables. The first procedure was followed here.
The 20 composite variables were first submitted to a factor analysis with varimax rotation. These variables loaded orthogonally onto five statistically significant factors with eigenvalues of greater than one. After inspection of the composite variables loading onto each factor, these factors were labeled as: 1) family support 2) family closeness 3) family conflict 4) delinquent acts and status offenses by the adolescent and by his/her friends and 5) relationships with peers. Table 9 presents the eigenvalues and the factor loadings and percent of variance accounted for by the variables forming each factor.

Looking at these factors, we find that they describe in an overall fashion the major variables of interest in this study. In particular, the three factors referring to the family summarize interactions established among family members from a family systems perspective. The two factors of family closeness and family support conform conceptually to Minuchin and Haley's views on adaptive family functioning. The factor of family conflict represents the dysfunctional structures identified clinically as maladaptive to family functioning. The fact that delinquent/status offense activities by both the adolescent and his/her friends load onto the same factor suggests that adolescents who are delinquent also have friends who are delinquent. According to this factor analysis, variables representing delinquent activities by one's peers are not related to the variables assessing the amount of involvement
Table 9

Rotated Factor Loadings, Communalities, Eigen Values and Percent of Variance

Accounted for in Five Second-order Factors

<table>
<thead>
<tr>
<th>Factors/Composite Variables</th>
<th>Factor Loading</th>
<th>Communality</th>
<th>Eigen Value</th>
<th>Percent of Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1: Family Closeness</strong></td>
<td></td>
<td></td>
<td>1.54</td>
<td>7.0%</td>
</tr>
<tr>
<td>Closeness to Mother</td>
<td>.53</td>
<td>.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closeness to Father</td>
<td>.60</td>
<td>.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closeness to Most Favorite Sibling</td>
<td>.76</td>
<td>.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closeness to Least Favorite Sibling</td>
<td>.78</td>
<td>.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Factor 2: Family Support</strong></td>
<td></td>
<td></td>
<td>4.24</td>
<td>19.3%</td>
</tr>
<tr>
<td>Support from Mother</td>
<td>.76</td>
<td>.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support from Father</td>
<td>.81</td>
<td>.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support from Most Favorite Sibling</td>
<td>.78</td>
<td>.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support from Least Favorite Sibling</td>
<td>.66</td>
<td>.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Factor 3: Family Conflict</strong></td>
<td></td>
<td></td>
<td>2.14</td>
<td>9.7%</td>
</tr>
<tr>
<td>Marital Conflict</td>
<td>.73</td>
<td>.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ineffective Parent-Child Interactions</td>
<td>.81</td>
<td>.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scapegoating</td>
<td>.76</td>
<td>.65</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Factor 4: Delinquent Activities/
Negative Influence

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Delinquent Acts</td>
<td>.74</td>
<td>.69</td>
</tr>
<tr>
<td>Status Offenses</td>
<td>.47</td>
<td>.54</td>
</tr>
<tr>
<td>Drinking Behavior</td>
<td>.81</td>
<td>.72</td>
</tr>
<tr>
<td>Delinquent Acts by Friends</td>
<td>.83</td>
<td>.75</td>
</tr>
<tr>
<td>Status Offenses by Friends</td>
<td>.61</td>
<td>.69</td>
</tr>
<tr>
<td>Drinking Behavior by Friends</td>
<td>.82</td>
<td>.69</td>
</tr>
</tbody>
</table>

**Total Variance Explained:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Variance</td>
<td>4.45</td>
</tr>
<tr>
<td>Percentage</td>
<td>20.2%</td>
</tr>
</tbody>
</table>

### Factor 5: Peer Relationships

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Closeness to Friends</td>
<td>.76</td>
<td>.70</td>
</tr>
<tr>
<td>Support from Friends</td>
<td>.59</td>
<td>.72</td>
</tr>
<tr>
<td>Activities with Friends</td>
<td>.74</td>
<td>.67</td>
</tr>
</tbody>
</table>

**Total Variance Explained:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Variance</td>
<td>1.14</td>
</tr>
<tr>
<td>Percentage</td>
<td>5.2%</td>
</tr>
</tbody>
</table>
with peers. We see that these variables load onto the factor labeled as peer relationships. This factor can be described as representing interactions with peers in terms of the amount of support, closeness and time spent together. These results indicate that both the amount and nature of peer involvement must be taken into account when interactions with peers are assessed.

It was hypothesized that dysfunctional family structures and delinquency would be associated with clinical depression. When these five factors were submitted to a stepwise multiple regression procedure, results indicate that the family conflict factor accounted for the most variance (variance accounted for=9%, $b = .23$, $F(4, 172)=9.99$, $p < .001$) followed by the factor referring to delinquent acts and status offenses by the adolescent and by his/her friends (variance accounted for=4%, $b = .19$, $F(4, 172)=6.64$, $p < .001$) and the negative loading of the family closeness factor (variance accounted for=2%, $b = -.14$, $F(4, 172)=3.48$, $p < .01$). These results support the hypotheses on a general level and indicate that family conflict (representing the composite variables of marital conflict, ineffective parent-child interactions, and scapegoating) seems to have the most influence on depressive feelings of an adolescent.

It is interesting to note that the peer relationships factor does not account for a significant amount of variance. This finding suggests that interactions with the family, especially when they involve conflict, seem to play...
a more important role in explaining the incidence of clinical depression than peer interactions.

The significance of the delinquent activities/delinquent peer activities factor supports the research on adolescent depression indicating that depression is often associated with delinquent behavior. This finding also indicates that relationships with peers are significant in relation to clinical depression only when delinquent activities are involved. Thus, the nature of involvement with peers rather than the amount of involvement with peers seems to be related to the incidence of clinical depression.

These results indicate statistically significant associations between dysfunctional family structures and clinical depression. In order to identify these associations concretely, analyses were then performed on the individual questions.

**Multivariate Analyses on the Individual Item Level**

A multivariate analysis was first conducted on the individual items to determine whether or not the clinical levels of the EDI differed significantly from one another. Planned paired comparisons were performed on all possible combinations of the four levels of the BDI. The EDI index of depression was the independent variable, with four levels representing the clinically-defined levels of depression. Due to the large number of items in relation to sample size, a subset of 75 items was selected as the dependent variables. These items included those making up the
composite variables significant in the multiple regression analysis, items in certain nonsignificant composite variables and selected other nonredundant items. This subset was restricted to behavioral assessment items with the exception of those items referring to peer activity.

Table 10 presents the multivariate Fs for each paired comparison. Results of this analysis indicate that there are significant differences in the paired comparisons between each clinically-defined level of depression in relation to the dependent measures.

One way ANOVAs were then performed on these items to determine specific questions which did or did not reflect associations with clinical depression. The multivariate significance justifies the reporting of the omnibus Fs obtained from these analyses.

Comparisons of Means for Individual Questions

In order to demonstrate these specific associations with clinical depression in a clear and understandable fashion, comparisons of means for the items across the four levels are presented. Selected univariate results on the paired comparisons obtained from the multivariate analysis are also presented to clarify these associations. Findings on the associations between clinical depression and family structures are discussed first, followed by results of associations between clinical depression and both delinquency and peer relationships/peer delinquent involvement. Findings on variables associated with
Table 10
Multivariate Fs for Paired Contrasts of Four Levels of Clinical Depression

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>F</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not depressed versus mildly depressed</td>
<td>1.47</td>
<td>75,280</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td>(1-2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Not depressed versus moderately depressed</td>
<td>2.24</td>
<td>75,280</td>
<td>.0001</td>
</tr>
<tr>
<td></td>
<td>(1-3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Not depressed versus severely depressed</td>
<td>3.14</td>
<td>75,280</td>
<td>.0001</td>
</tr>
<tr>
<td></td>
<td>(1-4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Mildly depressed versus moderately depressed</td>
<td>1.82</td>
<td>75,280</td>
<td>.0003</td>
</tr>
<tr>
<td></td>
<td>(2-3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Mildly depressed versus severely depressed</td>
<td>3.02</td>
<td>75,280</td>
<td>.0001</td>
</tr>
<tr>
<td></td>
<td>(2-4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Moderately depressed versus severely depressed</td>
<td>1.78</td>
<td>75,280</td>
<td>.0005</td>
</tr>
<tr>
<td></td>
<td>(3-4)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
depression based on various theories of depression are then presented. In this discussion, the four levels of the BDI scale are referred to as: "not depressed group", "mildly depressed group", "moderately depressed group", and "severely depressed group".

**Associations between Family Structures and Clinical Depression**

The differences among the four groups across the family structure items support the relationships found at the composite level. A consistent pattern of association between dysfunctional behavioral interactions and clinical depression at the specific item level was found. For clarity of presentation, the results of these questions are grouped into three categories: interaction patterns between parents and children (i.e., parental subsystem), interaction patterns between parents (i.e., spousal subsystem), and interaction patterns among siblings (i.e., sibling subsystem).

**Parental subsystem** The means and a summary of the univariate analyses of variance for the family interaction items across the four groups are presented in Table 11 and are graphically illustrated in Figure 1.

The items referring to ineffective parent-child interactions demonstrate the hypothesized association. Looking at Figure 1, we find that the severely depressed group reports arguments with their parents (item B8) three to four times a week while the not depressed group reports
Table 11
Means, Omnibus F and Univariate Contrasts for Parental Subsystem Items

<table>
<thead>
<tr>
<th>BDI Categories</th>
<th>Not (n=188)</th>
<th>Mild (n=82)</th>
<th>Moderate (n=68)</th>
<th>Severe (n=20)</th>
<th>Omnibus F+p value</th>
<th>Univariate Fs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Ineffective Parent-Child Interactions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B8: mother, father, you argue</td>
<td>3.50</td>
<td>3.57</td>
<td>4.09</td>
<td>4.95</td>
<td>8.23</td>
<td>*** *** * ***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*** *** * ***</td>
</tr>
<tr>
<td>B12: mother and father yell and shout at you</td>
<td>2.86</td>
<td>3.30</td>
<td>3.47</td>
<td>4.10</td>
<td>5.11</td>
<td>*** ** *</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*** ** *</td>
</tr>
<tr>
<td>B13: you yell and shout at mother and father</td>
<td>2.84</td>
<td>3.35</td>
<td>3.57</td>
<td>4.50</td>
<td>8.30</td>
<td>*** *** * **</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*** *** * **</td>
</tr>
<tr>
<td>2) Scapegoating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B6: blamed in marital arguments</td>
<td>1.87</td>
<td>2.42</td>
<td>2.57</td>
<td>3.28</td>
<td>5.77</td>
<td>*** ** **</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*** ** **</td>
</tr>
<tr>
<td>B14: blamed in family arguments</td>
<td>2.28</td>
<td>2.96</td>
<td>3.00</td>
<td>3.80</td>
<td>7.35</td>
<td>*** *** *</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*** *** *</td>
</tr>
</tbody>
</table>
3) **Parental Treatment of Children**

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Mean 1</th>
<th>Mean 2</th>
<th>Mean 3</th>
<th>Mean 4</th>
<th>Mean 5</th>
<th>Mean 6</th>
<th>p Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1: you break rules</td>
<td>3.39</td>
<td>3.73</td>
<td>3.69</td>
<td>5.20</td>
<td>9.92</td>
<td></td>
<td>p &lt; .00001</td>
<td>*** *** ***</td>
</tr>
<tr>
<td>C2: siblings break rules</td>
<td>3.49</td>
<td>3.81</td>
<td>3.79</td>
<td>4.21</td>
<td>1.74</td>
<td></td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>C3: parents discipline</td>
<td>2.49</td>
<td>2.85</td>
<td>2.81</td>
<td>3.55</td>
<td>4.16</td>
<td></td>
<td>p &lt; .007</td>
<td>** ** *</td>
</tr>
<tr>
<td>C4: parents discipline</td>
<td>2.70</td>
<td>2.66</td>
<td>2.85</td>
<td>2.73</td>
<td>0.21</td>
<td></td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>C5: parents give you</td>
<td>4.17</td>
<td>4.40</td>
<td>4.07</td>
<td>3.30</td>
<td>1.38</td>
<td></td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>C6: siblings give</td>
<td>4.04</td>
<td>4.40</td>
<td>4.08</td>
<td>4.21</td>
<td>0.84</td>
<td></td>
<td>ns</td>
<td></td>
</tr>
</tbody>
</table>
4) Support from Father

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.47 3.27 3.06 2.47</td>
<td>2.37,ns</td>
<td>3.58 3.00 2.93 2.68</td>
<td>3.24 p&lt;.03</td>
<td>**</td>
<td>2.70 2.54 2.26 1.84</td>
</tr>
</tbody>
</table>
5) Support from Mother

| Item          | 4.24 | 4.22 | 4.16 | 3.10 | 2.46,ns | 4.12 | 3.56 | 3.63 | 3.45 | 2.22,ns | 3.57 | 3.59 | 3.29 | 2.70 | 1.47,ns | 3.70 | 3.58 | 3.40 | 2.60 | 1.88,ns | 4.11 | 3.54 | 3.51 | 3.05 | 3.61 p<.02 | 4.06 | 3.58 | 3.56 | 3.05 | 2.68 p<.05 | **  | *  | **  | *  |
### 6) Activities with Parents

<table>
<thead>
<tr>
<th></th>
<th>A1: do things together with mother</th>
<th>A2: do things together with father</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.62 4.51 4.10</td>
<td>4.18 4.31 3.78</td>
</tr>
<tr>
<td>SD</td>
<td>3.60</td>
<td>3.00</td>
</tr>
<tr>
<td>p</td>
<td>3.13 p&lt;.03</td>
<td>3.71 p&lt;.02</td>
</tr>
<tr>
<td></td>
<td>*</td>
<td>**</td>
</tr>
</tbody>
</table>

### 7) Physical Affection from Parents

<table>
<thead>
<tr>
<th></th>
<th>A1: affection from mother</th>
<th>A12: affection from father</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.24 4.10 4.25</td>
<td>3.42 3.36 3.26</td>
</tr>
<tr>
<td>SD</td>
<td>3.85</td>
<td>3.16</td>
</tr>
<tr>
<td>p</td>
<td>.46, ns</td>
<td>.12, ns</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 1

Means of Parental Subsystem Items

Key

- not depressed
- mildly depressed
- moderately depressed
- severely depressed

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Never</td>
<td>Less than 1-3 times</td>
<td>1-2 times</td>
<td>3-4 times</td>
<td>5-6 times</td>
<td>Every</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>monthly</td>
<td>a month</td>
<td>a week</td>
<td>a week</td>
<td>a week</td>
<td>day</td>
<td></td>
</tr>
</tbody>
</table>

Items

1) Ineffective Parent-Child Interactions

B8:
- mother, father, you argue

B12:
- mother and father yell and shout at you

B13:
- you yell and shout at mother and father
2) **Scapegoating**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Never</th>
<th>Less than 1 monthly</th>
<th>1-3 times a month</th>
<th>1-2 times a week</th>
<th>3-4 times a week</th>
<th>5-6 times a week</th>
<th>Every day</th>
</tr>
</thead>
</table>

- B6: blamed in marital arguments
- B14: blamed in family arguments

3) **Parental Treatment of Children**

- C1: you break rules
- C2: siblings break rules
- C3: parents discipline you
- C4: parents discipline siblings
- C5: parents give you privileges
- C6: parents give siblings privileges
4) **Support from Father**

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Less than 1-3 times a month</th>
<th>1-2 times a week</th>
<th>3-4 times a week</th>
<th>5-6 times a week</th>
<th>Every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>A22:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talk about school problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A27:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Help on school problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A32:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talk about friend problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A37:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Help on friend problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A42:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talk about family problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A47:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Help on family problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5) Support from Mother

Never | Less than monthly | 1-3 times a month | 1-2 times a week | 3-4 times a week | 5-6 times a week | Every day

A21: talk about school problems

A26: help on school problems

A31: talk about friend problems

A36: help on friend problems

A41: talk about family problems

A46: help on family problems
6) **Activities with Parents**

A1: do things together with mother

A2: do things together with father

7) **Physical Affection from Parents**

A11: affection from mother

A12: affection from father
such arguments less than weekly. The mildly depressed and moderately depressed groups fall in between these two groups. In fact, on this item, univariate analyses reveal that each group significantly differs from one another except for in the case of the not depressed and mildly depressed comparison. Yelling and shouting at one's parents (item B13) is reported two to three times a week by the severely depressed group and only on a monthly basis in the not depressed group. Again, the mildly and moderately depressed groups fall in between, both reporting this interaction pattern less than once a week. In this case, the two significant paired comparisons are between the severely depressed and the not depressed groups and the severely depressed and mildly depressed groups. Across all these questions, the reported means are highest in the severely depressed group and decrease in order according to the remaining levels of depression. It is important to note here that these interactional patterns have been reported by all four groups in varying degrees of frequency. The importance of these reported percentages lies in the relative frequency at which these patterns are reported. The severely depressed group reports these interactions on a very frequent basis in relation to the other groups.

The items referring to scapegoating reflect this same pattern. Severely depressed adolescents report being blamed in marital arguments (item B6) several times a month and blamed in family arguments (item B14) several times a week.
The not depressed group, on the other hand, report being blamed in marital arguments less than monthly and only slightly more often in family arguments. Again, the significant paired comparisons are between the severely depressed and not depressed groups and the severely depressed and mildly depressed groups.

Although not directly referring to scapegoating, several items concern parental treatment of the adolescent in relation to other siblings. Looking at these items (C1 to C4), we find that the severely depressed group reports that they not only break rules significantly more often than the other groups (three to four times a week versus several times a month), but they also report being disciplined more often by their parents. It is interesting to note that there are no significant differences among the four groups' reports on items referring to parents granting privileges (C5 and C6). This finding suggests that the interaction patterns between parents and children concerning their behavior in the family are associated with clinical depression when based on maladaptive rather than adaptive functioning in the family. We see that associations between destructive forms of communication and/or relating and reports of clinical depression are statistically significant. Regarding parental support, a lack of support from the father is seen most clearly when the adolescent has problems related to the family. Severely depressed adolescents report talking to their father about family
problems (item A42) only a few times a month at most and receiving help with such problems (item A47) less than monthly. The not depressed group, however, reports significantly more support from their fathers than the severely depressed group both in terms of talking about family problems and receiving help on family problems. Results on the items relating to support from mother on family problems (items A41 and A46) reflect a pattern similar to the items referring to father's support on these kinds of problems. The paired comparisons between the not depressed and severely depressed groups and between the mildly depressed and severely depressed groups are also statistically significant on these two items.

Both the severely and moderately depressed adolescents report spending significantly less time with their parents in terms of behavioral interactions (items A1 and A2). Specifically, in relation to the father, adolescents in the severely depressed group report doing things together with their father only a few times a month, and the moderately depressed group less than weekly while the not depressed and mildly depressed groups report that they interact with their father several times a week. Reports of interactions with the mother generally follow this same pattern.

In relation to the ineffective parenting structure, the findings show that reports of a "distant" father (operationalized in terms of reduced interactions and support) are associated with clinical depression. However,
increased interactions with the mother indicating "overinvolvement" are not reported by the depressed groups. Instead, these results show that reports of reduced interactions with and support from both parents are reported by the severely and moderately depressed groups. In this study, the maladaptive effect of ineffective parenting on reports of clinical depression is demonstrated by both parents being "distant".

It is interesting to note that reports of the amount of physical affection received from parents do not differ across the four groups (items A11 and A12). This finding suggests that when destructive interaction patterns and forms of communication have been established among family members, these structures have more impact on the reporting of depressive feelings than the supportive patterns.

Spousal Subsystem Interaction problems in the spousal subsystem also indicate associations with depression. Table 12 presents the means and a summary of the univariate analyses of variance for the marital conflict questions which are graphically illustrated in Figure 2. Looking at Figure 2, we see that the severely depressed group is most extreme in how often they report their parents yelling and shouting at each other during marital arguments (item B4). This group reports their parents' yelling and shouting at least one to two times a week while the three other groups report this occurrence only on a monthly basis. These findings support the results on the parental subsystem items
Table 12
Means, Omnibus F and Univariate Contrasts
for Spousal Subsystem Items

<table>
<thead>
<tr>
<th>BDI Categories</th>
<th>Not (n=188)</th>
<th>Mild (n=82)</th>
<th>Moderate (n=68)</th>
<th>Severe (n=20)</th>
<th>Omnibus F+p value</th>
<th>1-4</th>
<th>2-4</th>
<th>3-4</th>
<th>1-2</th>
<th>1-3</th>
<th>2-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital Conflict</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B1: mother and father argue</td>
<td>3.33</td>
<td>3.48</td>
<td>4.00</td>
<td>3.84</td>
<td>3.54</td>
<td>** ***</td>
<td>***</td>
<td>***</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B2: mother and father argue in front of you</td>
<td>2.87</td>
<td>3.13</td>
<td>3.48</td>
<td>3.58</td>
<td>3.23</td>
<td>** ***</td>
<td>*</td>
<td>**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B4: mother and father yell and shout at each other</td>
<td>2.64</td>
<td>3.05</td>
<td>3.18</td>
<td>4.06</td>
<td>4.16</td>
<td>** ***</td>
<td>**</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p<.05  ** p<.01  *** p<.001
Figure 2

Means of Spousal Subsystem Items

Key
⊙ not depressed
■ mildly depressed
▲ moderately depressed
● severely depressed

Items

Marital Conflict

B1: mother and father argue

B2: mother and father argue in front of you

B4: mother and father yell and shout at each other

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Less than 1-3 times</td>
<td>1-2 times</td>
<td>3-4 times</td>
<td>5-6 times</td>
<td>Every month</td>
<td>a month</td>
</tr>
</tbody>
</table>

Note: RTT
concerning the association between destructive interaction patterns established and clinical depression. In addition, it can again be seen that the relative frequency with which these interactions are being reported by the severely depressed group is higher than those of the other three groups.

Sibling Subsystem Table 13 presents means and a summary of univariate analyses of variance for the items that assess behavioral interactions and Figure 3 graphically illustrates the comparisons of means among the four groups. Reports of feeling close to one's least favorite sibling (in terms of doing activities together and receiving physical affection) differ significantly across the four levels of clinical depression. The severely depressed group reports doing activities together less than monthly compared to the not depressed group's report of interactions of one to three times a month or more. The same pattern does not hold, however, in relation to questions referring to feeling close to one's most favorite sibling. Here, there is no significant difference among the four groups in reports of doing activities together or in receiving physical affection. These results indicate that the adolescents reporting infrequent interactions with one sibling and more frequent interactions with another sibling are in the severely depressed and moderately depressed groups. This finding suggests that when supportive interaction patterns are inconsistent among siblings, the adaptive function of
Table 13
Means, Omnibus Fs and Univariate Contrasts for Sibling Subsystem Items

<table>
<thead>
<tr>
<th>BDI Categories</th>
<th>Not (n=188)</th>
<th>Mild (n=82)</th>
<th>Moderate (n=68)</th>
<th>Severe (n=20)</th>
<th>Omnibus F+p value</th>
<th>Univariate Fs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-4</td>
<td>2-4</td>
<td>3-4</td>
<td>1-2</td>
<td>1-3</td>
<td>2-3</td>
</tr>
<tr>
<td>1) Closeness to Least Favorite Sibling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A4: do things together</td>
<td>3.28</td>
<td>3.30</td>
<td>2.90</td>
<td>1.93</td>
<td>3.94 * *</td>
<td>* * p&lt;.009</td>
</tr>
<tr>
<td>A14: affection from least favorite sibling</td>
<td>3.21</td>
<td>3.44</td>
<td>2.98</td>
<td>1.93</td>
<td>4.89 * *</td>
<td>* * p&lt;.003</td>
</tr>
<tr>
<td>2) Closeness to Most Favorite Sibling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A3: do things together</td>
<td>4.38</td>
<td>4.24</td>
<td>4.14</td>
<td>3.32</td>
<td>1.64, ns</td>
<td></td>
</tr>
<tr>
<td>A13: affection from most favorite sibling</td>
<td>2.78</td>
<td>2.75</td>
<td>2.86</td>
<td>2.47</td>
<td>.25, ns</td>
<td></td>
</tr>
</tbody>
</table>
Figure 3
Means of Sibling Subsystem Items

Key
○ not depressed
■ mildly depressed
▲ moderately depressed
● severely depressed

1) Closeness to Least Favorite Sibling

A4: do things together

A14: affection from least favorite sibling

2) Closeness to Most Favorite Sibling

A3: do things together

A13: affection from most favorite sibling
the sibling subsystem is substantially reduced and problems can occur.

**Associations between Delinquency and Clinical Depression**

The literature on depression in adolescents indicates that depression is often manifested through delinquent behavior. This research finding is supported in this sample. The delinquent items of stealing and smoking marijuana were reported to be associated with clinical depression. The moderately depressed and severely depressed groups report these delinquent acts more frequently than the not depressed and mildly depressed groups. Table 14 presents the means and a summary of the univariate analyses of variance for these items, and Figure 4 gives a graphic illustration of the means. Again, the pattern remains consistent. Drinking behavior also conforms to this pattern with the reported frequency of drinking (item D6) and getting drunk (item D7) higher in the moderately and severely depressed groups than the other two groups.

**Associations between Peer Relationships/Delinquent Peer Involvement and Clinical Depression**

Interestingly enough, interactions with peers in terms of support, closeness and activities do not differ across the four levels of depression. The nonsignificant finding at the multivariate level can be seen more clearly here. Severely depressed adolescents who do not interact with their parents often or receive support still maintain
Table 14
Means, Omnibus Fs and Univariate Contrasts for Delinquency Items

<table>
<thead>
<tr>
<th>BDI Categories</th>
<th>Not 1 (n=188)</th>
<th>Mild 2 (n=82)</th>
<th>Moderate 3 (n=68)</th>
<th>Severe 4 (n=20)</th>
<th>Omnibus F+p value</th>
<th>Univariate Fs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1-4</td>
<td>2-4</td>
</tr>
<tr>
<td>1) Delinquent Acts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D3: stealing</td>
<td>1.73</td>
<td>2.11</td>
<td>2.54</td>
<td>2.85</td>
<td>6.10 p&lt;.0005</td>
<td>***</td>
</tr>
<tr>
<td>D9: smoke marijuana</td>
<td>2.63</td>
<td>3.17</td>
<td>3.81</td>
<td>4.35</td>
<td>6.26 p&lt;.0004</td>
<td>***</td>
</tr>
<tr>
<td>2) Drinking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D6: drink</td>
<td>4.26</td>
<td>4.96</td>
<td>5.28</td>
<td>5.35</td>
<td>4.71 p&lt;.003</td>
<td>***</td>
</tr>
<tr>
<td>D7: get drunk</td>
<td>3.23</td>
<td>3.85</td>
<td>4.35</td>
<td>4.55</td>
<td>5.18 p&lt;.002</td>
<td>***</td>
</tr>
</tbody>
</table>
Figure 4

Means of Delinquency Items

Key
⊙ not depressed
■ mildly depressed
▲ moderately depressed
● severely depressed

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Once in a year</td>
<td>2-3 times a year</td>
<td>Less than monthly</td>
<td>Once a month</td>
<td>1-3 times a month</td>
<td>Weekly or more</td>
</tr>
</tbody>
</table>

Items

1) Delinquent Acts

D3: stealing

D9: smoke marijuana

2) Drinking

D6: drink

D7: get drunk
relationships with their friends. Looking at Figure 5 (the means and a summary of the univariate analyses of variance for these items are given in Table 15) it can be seen that there are no differences in the reports of the amount of support received from friends, feeling close to friends, or in the amount of time spent with friends. This finding is important because it indicates that adolescents do not necessarily withdraw from others or spend time alone when they are depressed. Lack of support and closeness to parents, on the other hand, are significantly associated with clinical depression.

However, when we look at delinquent peer involvement, we find several specific associations with clinical depression. At the higher-order analysis level, these items were included in the delinquent activities/delinquent peer activities factor which was significantly related to clinical depression. Here, we see that the severely depressed group reports having more friends who steal and smoke marijuana than do the not depressed group (see Table 16 for means and univariate summary and Figure 6 for a graphic illustration). In addition, the severely depressed group reports having significantly more friends who drink and get drunk than do the mildly depressed and not depressed groups.

These results support on a specific level the multivariate findings on peer relationships and delinquent peer involvement. The four groups do not report differences
Table 15
Means, Omnibus Fs and Univariate Contrasts
for Peer Relationship Items

<table>
<thead>
<tr>
<th>BDI Categories</th>
<th>Not (n=188)</th>
<th>Mild (n=82)</th>
<th>Moderate (n=68)</th>
<th>Severe (n=20)</th>
<th>Omnibus F+p value</th>
<th>Univariate Fs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*p&lt;.05</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>**p&lt;.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>***p&lt;.001</td>
</tr>
<tr>
<td>1) Activities with Friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E1: go to school events with friends</td>
<td>3.74</td>
<td>3.77</td>
<td>4.21</td>
<td>3.20</td>
<td>1.61,ns</td>
<td></td>
</tr>
<tr>
<td>E2: spend time with friends</td>
<td>5.25</td>
<td>5.21</td>
<td>5.49</td>
<td>5.45</td>
<td>.50,ns</td>
<td></td>
</tr>
<tr>
<td>E3: friends over to house</td>
<td>4.19</td>
<td>4.00</td>
<td>4.22</td>
<td>4.40</td>
<td>.44,ns</td>
<td></td>
</tr>
<tr>
<td>E4: go out with friends</td>
<td>4.13</td>
<td>4.54</td>
<td>4.21</td>
<td>4.60</td>
<td>1.07,ns</td>
<td></td>
</tr>
</tbody>
</table>
2) **Support from Friends**

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A25: talk about school problems</td>
<td>5.00</td>
<td>4.90</td>
<td>5.50</td>
<td>5.35</td>
<td>1.27,ns</td>
</tr>
<tr>
<td>A30: help on school problems</td>
<td>4.23</td>
<td>3.94</td>
<td>4.21</td>
<td>4.05</td>
<td>.49,ns</td>
</tr>
<tr>
<td>A35: talk about friend problems</td>
<td>4.69</td>
<td>4.89</td>
<td>5.12</td>
<td>4.55</td>
<td>1.16,ns</td>
</tr>
<tr>
<td>A40: help on friend problems</td>
<td>4.37</td>
<td>4.49</td>
<td>4.40</td>
<td>4.35</td>
<td>.09,ns</td>
</tr>
<tr>
<td>A45: talk about family problems</td>
<td>4.15</td>
<td>4.51</td>
<td>4.88</td>
<td>4.65</td>
<td>1.68,ns</td>
</tr>
<tr>
<td>A50: help on family problems</td>
<td>3.76</td>
<td>3.75</td>
<td>4.09</td>
<td>4.55</td>
<td>1.25,ns</td>
</tr>
</tbody>
</table>

3) **Closeness to Friends**

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A5: do things together with friends</td>
<td>5.60</td>
<td>5.34</td>
<td>5.56</td>
<td>5.53</td>
<td>.53,ns</td>
</tr>
<tr>
<td>A15: physical affection from friends</td>
<td>2.96</td>
<td>2.55</td>
<td>2.98</td>
<td>2.58</td>
<td>1.01,ns</td>
</tr>
</tbody>
</table>
Figure 5

Means of Peer Relationship Items

Key

• not depressed
■ mildly depressed
▲ moderately depressed
○ severely depressed

Means

Never Less than 1-3 times 1-2 times 3-4 times 5-6 times Every
monthly a month a week a week a week day

Items

1) Activities with Friends

E1: go to school events with friends

E2: spend time with friends

E3: friends over to house

E4: go out with friends
2) **Support from Friends**

<table>
<thead>
<tr>
<th></th>
<th>monthly</th>
<th>a month</th>
<th>a week</th>
<th>3-4 times</th>
<th>5-6 times</th>
<th>Every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>A25:</td>
<td>talk about school problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A30:</td>
<td>help on school problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A35:</td>
<td>talk about friend problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A40:</td>
<td>help on friend problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A45:</td>
<td>talk about family problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A50:</td>
<td>help on family problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3) **Closeness to Friends**

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A5:</td>
<td>do things together</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A15:</td>
<td>physical affection from friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

129
Table 16
Means, Omnibus Fs and Univariate Contrasts
for Delinquent Peer Involvement Items

<table>
<thead>
<tr>
<th>BDI Categories</th>
<th>Not (n=188)</th>
<th>Mild (n=82)</th>
<th>Moderate (n=68)</th>
<th>Severe (n=20)</th>
<th>Omnibus F+p value</th>
<th>1-4</th>
<th>2-4</th>
<th>3-4</th>
<th>1-2</th>
<th>1-3</th>
<th>2-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Delinquent Acts by Friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E10: friends steal</td>
<td>2.08</td>
<td>2.44</td>
<td>2.41</td>
<td>2.65</td>
<td>4.33</td>
<td>***</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>p&lt;.005</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E16: friends smoke marijuana</td>
<td>2.58</td>
<td>2.93</td>
<td>3.18</td>
<td>3.90</td>
<td>8.99</td>
<td>***</td>
<td>***</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>p&lt;.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) Drinking by Friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E13: friends drink</td>
<td>3.50</td>
<td>3.96</td>
<td>3.82</td>
<td>4.30</td>
<td>5.08</td>
<td>***</td>
<td>**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>p&lt;.002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E14: friends get drunk</td>
<td>3.12</td>
<td>3.54</td>
<td>3.51</td>
<td>4.05</td>
<td>4.98</td>
<td>***</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>p&lt;.002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 6
Means of Delinquent Peer Involvement Items

Key
⊙ not depressed
■ mildly depressed
▲ moderately depressed
● severely depressed

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of friends</td>
<td>Few of friends</td>
<td>Some of friends</td>
<td>Most of friends</td>
<td>All of friends</td>
</tr>
</tbody>
</table>

Items

1) Delinquent Acts by Friends
E10: friends steal

E16: friends smoke marijuana

2) Drinking by Friends
E13: friends drink

E14: friends get drunk
in the amount of time spent with their friends, in how close they feel to their friends or in the amount of support received from their friends. It is only when the nature of this involvement concerns delinquent activities that associations with depression are reported. Here, we see that depressed adolescents who report frequent acts of stealing, smoking marijuana, and drinking also report frequent associations with peers involved in these same behaviors. These findings suggest that both delinquency and delinquent peer involvement are related to the incidence of clinical depression in adolescents.
The three primary goals of this exploratory study were: 1) to determine the symptomatology and incidence of depression in adolescents; 2) to empirically verify clinically observed family structures in a non-clinical population; and, 3) to determine whether or not there are associations between dysfunctional structures and adolescent depression. On the basis of this study, initial conclusions regarding these goals can be drawn. Because it is an exploratory study using survey techniques, these conclusions must remain tentative in nature and must be verified by future studies.

Concerning the first goal, this study provides empirical data on the incidence of depression in a large, non-clinical population. The BDI (Beck Depression Inventory) was selected to determine depressive symptomatology because of its success in assessing the clinical syndrome of depression on over 100 research investigations (Beck and Beck, 1975). Using the BDI clinical classification, 24.6% of the sample report clinical symptoms characteristic of the moderately and severely depressed levels. This finding supports the 20% incidence
rate of depression in non-clinical populations suggested by Baskin (1977). This reported rate also indicates that depression rates reported in clinical settings may be underestimating the actual incidence rates of depression in the general adolescent population.

The finding of higher rates of clinical depression in 14 and 15 year olds than in 18 year olds suggests that incidence rates may vary with age. In the study by Beck and Beck (1975) of 11 to 15 year olds, 36% fell into the moderately and severely depressed categories. The higher levels of depression among 14 and 15 year olds raises the issue of whether or not this is a critical developmental period in which depressive symptoms are manifested. Considering that this age represents the early stages of adolescence, this finding could also indicate that this is a time period in which the stress and demands of adolescence results in an increase in depressive symptoms. More research on the course of depression across developmental stages and on the stresses occurring at various age levels is needed before definitive conclusions on this issue can be drawn.

The fact that females reported significantly higher rates of depression than males provides data relevant to the typical finding of a higher proportion of females undergoing depression of clinical significance than males. The question of whether or not depression is a sex-linked disturbance, unfortunately could not be evaluated in this
study. According to Weissman and Klerman (1977), cultural factors play an important role in the higher incidence of depression in females than in males. Studies which are aimed at assessing the impact of these factors empirically would certainly advance the knowledge on the relationship between gender and depression. The possibility also exists that females are simply more apt to report these symptoms than are males. During questionnaire administration, the author observed that males and females reacted differently to the depression items, especially those referring to behavioral symptoms. Females seemed to take these items more seriously than males. Again, cultural factors may be influential here. Males may be less likely to report behaviors such as crying spells because these behaviors are contrary to the sex-role stereotypes of male and female behaviors. Adolescents' perceptions of expected behavioral characteristics of males and females may impact on the likelihood that they ascribe these behaviors to themselves. Future research should take this factor into account as well.

Behavioral indicators of depression were also assessed in this study. The selection of these measures was based on previous research studies delineating the types of behavioral symptoms characteristic of depression in adolescents. The significant correlation found between the BDI and these behavioral measures not only adds to the construct validation of the BDI scale, but also suggests
that depression in adolescence is manifested behaviorally. However, this finding must be viewed with caution as we cannot assume that the adolescents who report these behavioral symptoms would be necessarily described as depressed in a clinical sense. If the goal is to identify symptoms of depression, we must be careful not to include behaviors which may be indicative of the developmental process in general and not specific to the psychological disorder of depression.

The findings on associations between depression and delinquency provide support for Weiner's (1975) suggestion that delinquency is a possible result of depression. We can say that adolescents classified as being clinically depressed report delinquent activities. However, this finding does not allow for any conclusions to be drawn concerning the directionality of this relationship. It seems likely that depressive feelings such as worthlessness and unhappiness would lead the adolescent into becoming involved in delinquent activities rather than the reverse sequence of events, but this must remain at the level of speculation.

The importance of these findings lies in the useful information it provides for parents, teachers, law enforcement personnel and clinicians. To be aware that an adolescent who is delinquent might also be depressed would sensitize people to watch out for affective and behavioral symptoms characteristic of depression. In the same vein,
adolescents who display overt behaviors symptomatic of depression could benefit from people who could interpret these behaviors as possible indicators of depression.

Considering the second goal (i.e., to empirically verify clinically observed family structures in a non-clinical population), it can be concluded that behavioral interactions similar to clinical descriptions of dysfunctional family structures are widely reported in a non-clinical sample. Although previous research on the assessment of family structures in a non-clinical population (cf., Arnold, 1980) verified the existence of certain clinically observed structures, results were not specific in terms of the frequency with which these interactions were occurring. This limitation was due primarily to the methodology employed. Specifically, Arnold utilized non-behavioral assessments over a six-year time period in a college population. In the present study, the items assessing family interactions referred only to the past year in an effort to obtain a more accurate indication of the frequency with which these interactions occur. Additionally, because behavioral assessments were employed, the reported interactions are in operational and concrete terms.

Furthermore, the verification of these behavioral interactions among adolescents from a high school population extends the generalizability of these combined results to include a wider range of the population. Given that two
empirical studies which used different populations and criteria for assessment reached similar conclusions, the author concludes that the family structures described by Minuchin (1974) and Haley (1976) are functional concepts applicable to family research.

Concerning the third goal (i.e., to determine whether or not there are associations between dysfunctional structures and adolescent depression), the nature of family interactions seems to be a relevant variable in explaining the incidence of adolescent depression. The author found a number of statistically significant relationships between dysfunctional behavioral interactions among family members and depressive symptomatology. These findings suggest that family structural variables may be as useful in explaining adolescent depression as variables relating to individual losses. A reconceptualization of the nature of loss in terms of a chronic loss of supportive and adaptive interactions among family members may lead to a better understanding of the antecedents of depression in adolescence. Let us look at the implications of these findings in light of a family structural perspective.

We can think of a loss of adaptive and supportive interactions with family members in terms of both the lack of supportive exchanges and the predominance of conflictual exchanges occurring in a family. The significance of the family conflict factor in explaining adolescent depression suggests that interactions which are destructive in nature
have a strong impact on an individual's sense of psychological health. The family structures of marital conflict, ineffective parent-child interactions and scapegoating practices represented this family conflict factor. Looking at the interaction patterns which define these structures, we find that they involve destructive modes of communications and argumentative exchanges which occur both between parents and between parents and the adolescent.

The statistically significant relationship between the frequency of these destructive interactions and reported depressive symptoms can be interpreted from a family structural perspective. According to Minuchin (1974), repeated occurrences of the same kind of interactions indicate rigidity in patterns of relating. When these interactions are primarily maladaptive in nature, this rigidity is said to preclude supportive communication among family members. Thus, the predominance of conflictual exchanges in families of depressed adolescents suggests that adaptive interactions are less likely to occur. As a result, the adolescent experiences an ongoing loss in supportive exchanges because rigidly destructive interactions have been established.

An important issue to note here is the overriding influence of these rigid, maladaptive interaction patterns. Findings revealed no significant differences among the four groups of the BDI clinical classification in the amount of
physical affection received from their parents. This suggests that parents may not be able to compensate for the destructive ways of relating by giving their child affection.

The fact that these interactions are reporting as occurring in both the parental and spousal subsystems suggests that an adolescent may be adversely affected by destructive interactions whether or not they involve him/her directly. The association between scapegoating practices and clinical depression illustrates that problems in one subsystem can permeate into another subsystem. When an adolescent reports that he/she is frequently blamed for causing a marital argument, this response indicates problems not only in the spousal subsystem, but in the nature of interaction between parents and children as well. This finding supports Minuchin's theory of the interdependence of subsystems in a family system. When rigid patterns of interactions are established among members in one subsystem, these patterns seem to dominate how an individual relates to family members in other subsystems as well.

This rigidity in interaction patterns can also be seen in the significant association between the lack of family closeness and clinical depression. The lack of family closeness can be interpreted as a loss of supportive exchanges. Depressed adolescents reported spending little time with their parents and receiving little parental support. A possible explanation for this loss of
interactions is that when arguments and conflictual exchanges occur frequently, the adolescent is less likely to feel close to his/her parents. Consequently, parent-child interactions are infrequent. However, it is equally plausible to assume that when adolescents do not receive support from their parents, they are more likely to engage in arguments and parents may be more apt to blame them for problems occurring in the family. Due to the design of this study, we cannot identify the causal sequence in these interaction patterns. However, given that the findings show clinical depression to be significantly associated with both a lack of support and frequent maladaptive interactions, we can tentatively conclude that an ongoing loss of supportive and adaptive interactions between parents and children is related to how the adolescent is able to cope.

The loss of adaptive support is reflected in the inconsistent sibling interactions reported by depressed adolescents as well. The association between a lack of closeness to one's least favorite sibling and clinical depression suggests that communication and support among siblings is also an important aspect of effective family functioning. This finding illustrates again the pervasiveness of the kinds of interaction patterns established in the family. If adolescents do not interact often with their parents, they also may have difficulties in finding support from their brothers or sisters. The functional role of the sibling subsystem in providing a
sense of bonding and relatedness may be precluded if parents do not demonstrate this kind of support between themselves and to their children.

The application of the family structural perspective of Minuchin (1974) and Haley (1976) to the study of adolescent depression illuminates particular patterns of family interaction which are significantly associated with reported rates of depression. In addition, the findings allow us to distinguish certain interaction patterns which do not seem to be relevant to the incidence of depression. The findings show that not all of the structural interactions observed by Minuchin and Haley as characteristic of disturbed family functioning seem to impact on the incidence of depression. In particular, the concepts of parental overinvolvement and parent-child coalitions were not reported by depressed adolescents. On the basis of the ineffective parenting structure, it was expected that interactions denoting overinvolvement with the mother and distance from the father would be reported more often by depressed adolescents. Contrary to overinvolvement, depressed adolescents reported fewer interactions and less involvement with both parents. Reports of overinvolvement with mother, indicative of an inappropriate parent-child coalition, were not found to be related to reports of depression. These findings suggest that interactions denoting a "distant" parent may impact more on the incidence of depression than those patterns indicating a parent who is "overinvolved". This conclusion
seems reasonable if we interpret these "distant" interaction patterns as another example of the adolescent experiencing a chronic loss of adaptive support in family interactions.

The view that depression is related to a chronic loss of supportive interactions specific to the family is substantiated by the findings on peer relationships. The fact that depressed adolescents did not report a loss of supportive interactions with their friends speaks to the influential role the family plays in relation to psychological health.

An interesting finding was the association between clinical depression and involvement with friends who engage in delinquent activities. The author speculates that this relationship could be mediated by the nature of family interactions. According to Larson (1973), peer influence dominates an adolescent's attitudes and behaviors when the family environment involves marital conflict, difficulty in communication, and infrequent family interaction. We could interpret this kind of family environment as one which lacks supportive and adaptive interactions among members. Thus, it is possible that the association between delinquent peer involvement and clinical depression is not a direct relationship, but rather is mediated by the loss of supportive interactions from the family. Future research which employs more refined assessment and analysis techniques is needed to provide empirical data evaluating this speculation.
It should be acknowledged that the significant associations reported here are significant in a statistical sense. This statistical significance is due in large part to the power obtained from using analysis techniques on a large sample. When powerful techniques are employed, small differences among the groups can become statistically significant. This is typical of social science research which often employs large sample sizes in survey investigations.

If we look at the meaningfulness of these associations in terms of the amount of variance explained, we find that the statistically significant factors and items account for a small percentage of the total variance. This is most likely due to measurement error in the variables. More research is needed to refine these measures of family interaction in order to assess the strength of these associations. However, given the exploratory nature of this dissertation, the statistical significance of these associations does suggest that family factors would be useful to explore in future research on adolescent depression.

In summary, the findings discussed above contribute to the knowledge of the antecedents of depression by recognizing the important influence of ongoing family interactions. The application of a family structural approach in an empirical investigation demonstrated a relationship between clinically observed family structures
and adolescent depression in a large non-clinical population. These findings have theoretical implications for theories of depression. The continuing importance of the family needs to be taken into account in relation to individual psychological functioning. The traditional view of loss in terms of discrete events and acute conditions may be too narrow an interpretation. The findings here demonstrate that a loss of ongoing family interactions is also an important influence on adolescent depression. These results suggest that inclusion of variables assessing family interactions in research on depression could lead towards recognizing important variables not previously investigated.

Limitations of This Study

Several limitations of this study should be noted. The non-experimental design of this research did not allow for the causal nature of the reported relationships to be evaluated. We cannot conclude that dysfunctional structures result in an adolescent becoming depressed because respondents self-selected themselves into the levels of clinical depression. At this stage of research, correlational techniques could only be used to describe the findings.

A second major limitation is that the generalizability of these results are limited to the population sampled. Since the sample of adolescents was drawn from a primarily lower middle class population in southern New Hampshire, it is not known whether or not the reported frequencies are
applicable to other socio-economic classes or other geographic areas. However, given the statistically significant relationships observed between reported depression and dysfunctional family structures, it seems unlikely that the general relationships reported are spurious.

In addition, respondents were not randomly selected. Due to IRB (Institutional Review Board) standards, the sample was limited to volunteers who had permission from their parents to participate. This restriction may have self-selected a biased sample for investigation. However, because of this bias, it seems likely that the reported rates of incidence observed here may be lower compared to what actually exists in the general population. Future research should test these findings in different kinds of populations to determine their generalizability. Both clinical and non-clinical populations could be assessed to obtain comparable data on the role family interactions play in the incidence of depression.

A third limitation of this study is that it was cross-sectional. If we are assessing the impact of ongoing family interactions, a longitudinal design would allow for an investigation of the developmental nature of these family structures. Additional studies are needed which sample adolescents of different age levels at several points in time.
This limitation is especially crucial in relation to the assessment of depression. The lack of subsequent measures of depression across time raises the issue of the degree to which the reported depression ratings were stable. We cannot assume that the respondents reporting depressive symptoms at the time of questionnaire administration would report these same symptoms after several weeks or months. Outside factors which could have influenced the adolescent's self-concept at the time of questionnaire administration could not be evaluated. This limitation was compensated in part by including assessments of behavioral indices of depression occurring over a two month time period (See Part F in Appendix A). The significant correlation between these measures does lend credence to the accuracy and possible stability of the BDI ratings. However, future research needs to include assessments of the depressive state over time utilizing several techniques.

This limitation is compounded by the use of self-reports in this study. Self-reports run the risk of a perceptual bias which could not be evaluated here. Concerning depression, observations and psychiatric ratings are needed to validate the self-reports of depressive feelings and behaviors. In relation to assessing family interactions, subsequent research employing the entire family unit is needed to investigate family interactions in depth. However, at this exploratory stage, the emphasis was on operationalization and empirical verification which a
self-report measure could best provide.

In addition, the design of the questionnaire necessarily limited the extent to which family interactions and other influences on depression could be assessed. The focus on operationalizing the clinical observations of family structures of Minuchin and Haley precluded assessments of other family functioning which may impact on depression. Also, the reported associations between dysfunctional family interactions and depression may well be mediated by other factors not assessed. The antecedents of depression put forth in various theories of depression could not be fully evaluated in this study. Nonetheless, the author argues that these results warrant the inclusion of family interactions in future research on depression in adolescence.

Implications for Future Research

These findings have implications for future research on the influence of the family on family members' personal adjustment. The empirical verification of the family structures observed in family therapy situations contributes to building a model of family interaction based on empirical data. The family structural perspective of Minuchin and Haley offers a viable framework within which advances in the understanding of effective family functioning can be achieved. These findings provide the basis for the investigation of family interactions in other areas of family research. Based on the review of literature, the
incorporation of a family structural approach into these general approaches may lead toward a better understanding of the various aspects of family functioning. However, due to the focus of this study on family interactions in relation to adolescent depression, the possible contributions of a family structural approach to these areas were not evaluated.

Implications for Therapy

These findings also offer practical implications for clinicians in both family and individual therapy. The tentative conclusions from this study provide suggestions that may be useful to therapists in assessing disturbed family and individual functioning.

First, family therapists should be aware of the reported relationship between dysfunctional family structures and adolescent depression. According to Minuchin (1974), families come into therapy because of problems created by one member of the family. This member is often labeled as the "identified patient." The family therapist's role is then to help the identified patient and the family by changing the ways in which members relate to one another. It may be the case that depression is not the presenting problem. However, if the maladaptive interactions reported in this study are present in a family in therapy, the knowledge that an adolescent member might also be experiencing depression could aid in the therapist's interpretations of the family's difficulties. And, based on
the findings of higher rates of depression reported among females and in 14 and 15 year olds, we could tentatively say that the adolescent who might be depressed in these families is more likely to be a 14 or 15 year old female. Although speculative in nature, this information may at least sensitize the family therapist to be aware of and watch out for these possible relationships in disturbed families.

Individual therapists could also benefit from knowing about this reported link between dysfunctional family interaction and adolescent depression. If a client shows signs of depression, therapy at the individual level may not be effective if the depressive feelings have arisen from problems at the family level. It may be more important for the therapist to work with all members of the family as a strategy to alleviate the depressive symptoms of the client or refer the client to someone who can.

Secondly, the findings showed that the maladaptive interactions assessed in this study were reported in varying frequencies across the sample. This suggests that these interactions are not likely to be unique to families who seek therapy. However, it is often the case that when we are experiencing problems, we think that no one else could be having such difficulties. Families in therapy may be wrestling with similar thoughts. It may be quite valuable to families if the therapist could make them aware of the pervasiveness of these maladaptive interactions. Perhaps then, the process of change would not seem so monumental to
families.

Finally, family therapists often observe maladaptive interaction patterns characteristic of an overinvolved mother and a distant father in disturbed families. Results here revealed that depression was related to both parents being "distant". This finding may be useful to family therapists in helping them to assess the kinds of problems in the family that are associated with "distant" parents. In addition, it might be very helpful if family therapists were alert to the possible maladaptive effect of a "distant" as well as an "overinvolved" mother.

The implications suggested above are very tentative in nature, but illustrate the possible usefulness of these empirical findings to a clinical setting. Future research is needed before these suggestions could be translated into practical strategies for clinicians. There are several issues future research should address.

Future Research

Given that these dysfunctional structures seem to be common to both clinical and non-clinical families, more research is needed to be able to distinguish families with these interactions who are in need of clinical help from those families functioning adaptively with these interactions. The crucial question here seems to be, can we identify a frequency level at which these interactions occur that seems to signal family dysfunctioning? Research advances in this area could possibly lead toward designing
clinical interventions which might anticipate and perhaps prevent family dysfunction from reaching disturbed levels.

Additionally, other members in the family could be experiencing problems in relation to these maladaptive interactions. If the adolescent shows depressive symptoms in these families, it may be possible that the mother, father or other children in the family could be experiencing depression as well. Research which assesses depression among all family members in relation to the kinds of interactions established might be able to identify the pervasiveness of the reported association between depression and dysfunctional family structures.

Moreover, other psychological disorders may be related to these maladaptive behavioral interactions. With respect to the adolescent, the nature of family interaction might be related to other outcomes such as school performance and alcohol and drug abuse. Also, parents in these families could be experiencing high levels of stress from such interactions which may have both psychological and physiological effects. Research which employs a family structural approach might be able to delineate other variables which are related to the nature of dysfunctional family interactions.
REFERENCES


Burgess, E. W. The family as a unity of interacting persons. Family 3-6, 1926.


Terry, L. Depression: Research and the administration of the Beck Depression Inventory to adolescents. Unpublished senior thesis, Newton College of the


PART A

The following questions ask you about your relationships with your parents, your brother(s) or sister(s) and close friends during the past year.

Families differ in how often members do activities with each other that they both enjoy. In general, over the past year, how often have you and the following people done different activities together that you both enjoy — Things like playing games or sports, going to the movies or working on things together? Answer by circling the answer number that is most true for you.

<table>
<thead>
<tr>
<th></th>
<th>7 = every day (7 times a week)</th>
<th>6 = 5-6 times a week</th>
<th>5 = 3-4 times a week</th>
<th>4 = 1-2 times a week</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 = less than once a week,</td>
<td></td>
<td></td>
<td>2 = less than once a month</td>
</tr>
<tr>
<td></td>
<td>1-3 times a month</td>
<td></td>
<td></td>
<td>1 = never</td>
</tr>
<tr>
<td></td>
<td>NA = less than once a month</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NA = not applicable</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DONE THINGS TOGETHER WITH YOUR:

1. mother (or stepmother if you live with her) 7 6 5 4 3 2 1 NA
2. father (or stepfather if you live with him) 7 6 5 4 3 2 1 NA
3. "most favorite" brother or sister (or your only brother or sister) 7 6 5 4 3 2 1 NA
4. "least favorite" brother or sister (does not apply if you have only one brother or sister) 7 6 5 4 3 2 1 NA
5. close friends 7 6 5 4 3 2 1 NA

Now, think about how often you did do these activities with others in terms of how much you wanted to spend time with each person. With some people you may have done things together more than you wanted to while with others you may have done things less than you wanted. We want you to rate the amount of time you spent doing these activities with others. For each question, circle the answer number that is most true for you.

<table>
<thead>
<tr>
<th></th>
<th>7 = did things together much more than you wanted to</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6 = did things together as much as you wanted to</td>
</tr>
<tr>
<td></td>
<td>5 = did things together much less than you wanted to</td>
</tr>
<tr>
<td></td>
<td>4 = did things together less than you wanted to</td>
</tr>
<tr>
<td></td>
<td>3 = did things together (about right)</td>
</tr>
<tr>
<td></td>
<td>2 = did things together less than you wanted to</td>
</tr>
<tr>
<td></td>
<td>1 = did things together much more than you wanted to</td>
</tr>
<tr>
<td></td>
<td>NA = not applicable</td>
</tr>
</tbody>
</table>

6. mother (or stepmother) 7 6 5 4 3 2 1 NA
7. father (or stepfather) 7 6 5 4 3 2 1 Na
Families differ from one another in how much physical affection members show each other and to others. In general, over the past year, how often have the following people shown you affection such as hugging you, putting his or her arm around you, etc? Circle the answer number that is most true for you.

7 = every day (7 times a week)  
6 = 5-6 times a week  
5 = 3-4 times a week  
4 = 1-2 times a week  
3 = less than once a week, 1-3 times a month  
2 = less than once a month  
1 = never  
NA = not applicable

1. mother (or stepmother)  
2. father (or stepfather)  
3. "most favorite" (or only) brother or sister  
4. "least favorite" brother or sister (NA if you have only one)  
5. close friends
Now, we want you to rate the affection you have received from others in terms of how much affection you feel each person should have shown you. Circle the answer number that is most true for you.

16. mother (or stepmother)
   showed affection
   much more than should have
   showed affection
   as much as should have (about right)
   showed affection
   much less than should have

17. father (or stepfather)
   showed affection
   much more than should have
   showed affection
   as much as should have (about right)
   showed affection
   much less than should have

18. "most favorite" brother or sister
   showed affection
   much more than should have
   showed affection
   as much as should have (about right)
   showed affection
   much less than should have

19. "least favorite" brother or sister
   (NA if you have only one)
   showed affection
   much more than should have
   showed affection
   as much as should have (about right)
   showed affection
   much less than should have

20. close friends
   showed affection
   much more than should have
   showed affection
   as much as should have (about right)
   showed affection
   much less than should have

We all have problems or concerns in our everyday life. When we do have problems, some people find it useful to talk to friends and family members about them while others do not find it useful. The following questions ask you about your discussions with family and friends about different types of problems and concerns you have had in the past year.

A. In the past year, when you have had a problem at SCHOOL such as doing poorly in a class or not getting along with a teacher, how often have you TALKED ABOUT IT with the following people? Circle the answer number that is most true for you.

- 7 = every day (7 times a week)
- 6 = 5-6 times a week
- 5 = 3-4 times a week
- 4 = 1-2 times a week
- 3 = less than once a week,
  1-3 times a month
- 2 = less than once a month
- 1 = never
- NA = not applicable

Talked about SCHOOL problems with your:

21. mother (or stepmother)  7 6 5 4 3 2 1 NA
22. father (or stepfather)  7 6 5 4 3 2 1 NA
Talked about SCHOOL problems with your:

<table>
<thead>
<tr>
<th></th>
<th>7 = every day (7 days a week)</th>
<th>6 = 5-6 times a week</th>
<th>5 = 3-4 times a week</th>
<th>4 = 1-2 times a week</th>
<th>3 = less than once a week, 1-3 times a month</th>
<th>2 = less than once a month</th>
<th>1 = never</th>
<th>NA = not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>23. &quot;most favorite&quot; (or only) brother or sister</td>
<td>7 6 5 4 3 2 1 NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. &quot;least favorite&quot; brother or sister (NA if you have only one)</td>
<td>7 6 5 4 3 2 1 NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. close friends</td>
<td>7 6 5 4 3 2 1 NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOW, how often in the past year have you been OFFERED HELP from the following people when you have had problems at SCHOOL?

<table>
<thead>
<tr>
<th></th>
<th>7 = every day (7 days a week)</th>
<th>6 = 5-6 times a week</th>
<th>5 = 3-4 times a week</th>
<th>4 = 1-2 times a week</th>
<th>3 = less than once a week, 1-3 times a month</th>
<th>2 = less than once a month</th>
<th>1 = never</th>
<th>NA = not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>26. mother (or stepmother)</td>
<td>7 6 5 4 3 2 1 NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. father (or stepfather)</td>
<td>7 6 5 4 3 2 1 NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. &quot;most favorite&quot; (or only) brother or sister</td>
<td>7 6 5 4 3 2 1 NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. &quot;least favorite&quot; brother or sister (NA if you have only one)</td>
<td>7 6 5 4 3 2 1 NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. close friends</td>
<td>7 6 5 4 3 2 1 NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B. In general, over the past year, when you have had a problem with a FRIEND such as a disagreement or a misunderstanding, how often have you TALKED ABOUT IT with the following people?

<table>
<thead>
<tr>
<th></th>
<th>7 = every day (7 days a week)</th>
<th>6 = 5-6 times a week</th>
<th>5 = 3-4 times a week</th>
<th>4 = 1-2 times a week</th>
<th>3 = less than once a week, 1-3 times a month</th>
<th>2 = less than once a month</th>
<th>1 = never</th>
<th>NA = not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>31. mother (or stepmother)</td>
<td>7 6 5 4 3 2 1 NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. father (or stepfather)</td>
<td>7 6 5 4 3 2 1 NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. &quot;most favorite&quot; (or only) brother or sister</td>
<td>7 6 5 4 3 2 1 NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. &quot;least favorite&quot; brother or sister (NA if you have only one)</td>
<td>7 6 5 4 3 2 1 NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. close friends</td>
<td>7 6 5 4 3 2 1 NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
NOW, how often in the past year have you been OFFERED HELP from the following people when you have had problems with FRIENDS?

36. mother (or stepmother)  7 6 5 4 3 2 1 NA
37. father (or stepfather)  7 6 5 4 3 2 1 NA
38. "most favorite" (or only) brother or sister  7 6 5 4 3 2 1 NA
39. "least favorite" brother or sister (NA if you have only one)  7 6 5 4 3 2 1 NA
40. close friends  7 6 5 4 3 2 1 NA

C. In general, when you have had a problem with MEMBERS OF YOUR FAMILY, such as arguments or misunderstandings, how often have you TALKED ABOUT IT with the following people?

41. mother (or stepmother)  7 6 5 4 3 2 1 NA
42. father (or stepfather)  7 6 5 4 3 2 1 NA
43. "most favorite" (or only) brother or sister  7 6 5 4 3 2 1 NA
44. "least favorite" brother or sister (NA if you have only one)  7 6 5 4 3 2 1 NA
45. close friends  7 6 5 4 3 2 1 NA

NOW, how often in the past year have you been OFFERED HELP from the following people when you have had problems with MEMBERS OF YOUR FAMILY?

46. mother (or stepmother)  7 6 5 4 3 2 1 NA
47. father (or stepfather)  7 6 5 4 3 2 1 NA
48. "most favorite" (or only) brother or sister  7 6 5 4 3 2 1 NA
49. "least favorite" brother or sister (NA if you have only one)  7 6 5 4 3 2 1 NA
50. close friends  7 6 5 4 3 2 1 NA
Everyone has expectations for other people. They expect us to act in certain ways and have expectations for us in school, in sports, etc. This set of questions asks you to rate the extent to which you have met the expectations of the following people in the past year. For example, you may have gone far beyond or surpassed some people's expectations while for others, you did not meet their expectations at all. For each question, circle the answer number that is most true for you.

<table>
<thead>
<tr>
<th>Question</th>
<th>Mother (or Stepmother)</th>
<th>Father (or Stepfather)</th>
<th>Most Favorite Brother/Sister</th>
<th>Least Favorite Brother/Sister</th>
<th>Close Friends</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td><strong>Note</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>surpassed or went beyond expectations</td>
<td>met expectations</td>
<td>about right expectations</td>
<td>did not meet expectations</td>
<td>at all</td>
</tr>
</tbody>
</table>
All parents have disagreements or arguments between themselves about such things as how to spend money, where to go on vacation, household chores, politics, etc. For the questions below, circle the answer number that is most true for you.

7 = every day (7 times a week)
6 = 5-6 times a week
5 = 3-4 times a week
4 = 1-2 times a week
3 = less than once a week, 1-3 times a month
2 = less than once a month
1 = never
NA = not applicable (parents did not (live together in the past year)

DURING THE PAST YEAR,

1. How often have your parents had such arguments or disagreements?

2. How often have your parents had these arguments or disagreements in front of you?

NOW we're interested in HOW your parents argue or disagree. In general, over the past year, when your parents argue or disagree, how often have they

3. discussed the issue in a relatively calm manner?

4. yelled or shouted at each other when they argue or disagree?

5. tried to ask your help to settle things?

6. tried to blame you for causing these problems?

7. In these arguments between themselves, which parent has the final say?

1. always mother (or stepmother)
2. usually mother
3. mother and father equally often
4. usually father (or stepfather)
5. always father
6. neither
7. does not apply
All parents also have arguments or disagreements with their children about such things as what the children are allowed to do (for example, have friends over, stay out late, go to a party, etc), allowances, household chores, etc. For the questions below, circle the answer number that is most true for you.

7 = every day (7 times a week)
6 = 5-6 times a week
5 = 3-4 times a week
4 = 1-2 times a week
3 = less than once a week,
2 = less than once a month
1 = never
NA = not applicable

DURING THE PAST YEAR,

8. How often have you and your parents (or your only parent if your parents don't live together) had such arguments or disagreements?

9. How often have your brother(s) or sister(s) had such arguments or disagreements with your parent(s)?

NOW we're interested in HOW YOU and your parents (or only parent) argue or disagree. In general, over the past year, when you and your parent(s) argue or disagree, how often have

10. your parent(s) discussed the issue in a relatively calm manner with you?

11. you discussed the issue in a relatively calm manner with your parent(s)?)

12. your parent(s) yelled or shouted at you during these arguments?

13. you yelled or shouted at your parent(s) during these arguments?

14. your parent(s) tried to blame you for causing these arguments?

15. In these arguments or disagreements between you and your parent(s), who generally makes the final decision?

1. always mother (or stepmother)
2. usually mother
3. mother and father equally often
4. always father (or stepfather)
5. usually father
6. usually you
7. always you
8. no one
The following questions ask you about your relationships with family members at home during the past year.

In general, over the past year, how often have the following situations occurred? Circle the answer number that is most true for you.

7 = every day (7 times a week)
6 = 5-6 times a week
5 = 3-4 times a week
4 = 1-2 times a week
3 = less than once a week, 1-3 times a month
2 = less than one a month
1 = never
NA = not applicable (don't have a brother or sister)

1. You breaking family rules
   (such as fighting, talking back, doing something you weren't allowed to do, etc) 7 6 5 4 3 2 1

2. Your brother(s) or sister(s) breaking family rules 7 6 5 4 3 2 1 NA

3. Parents disciplining you (scolding you, taking away privileges, etc) for breaking family rules
   7 6 5 4 3 2 1

4. Parents disciplining your brother(s) or sister(s) for breaking family rules
   7 6 5 4 3 2 1 NA

5. Parents giving you privileges
   7 6 5 4 3 2 1

6. Parents giving your brother(s) or sister(s) privileges
   7 6 5 4 3 2 1 NA

7. When a younger brother or sister has done something wrong, you being held responsible for his or her behavior
   7 6 5 4 3 2 1 NA

8. When you have done something wrong, a brother or sister being held responsible for your behavior
   7 6 5 4 3 2 1 NA
Below is a list of activities or things you might have done in the past year. We would like you to say how often you have done the activities or things listed at any time during the past year. Circle the answer number that is most true for you.

<table>
<thead>
<tr>
<th>Activity</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. skipping school without your parents' knowledge</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2. running away from home</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3. taking something from a store without paying for it</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4. carrying a phony ID card</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5. breaking street lamps or windows</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6. drinking wine, beer or other alcohol</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7. being drunk</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>8. having a physical fight with another person</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>9. smoking marijuana</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
PART E

The following questions ask you about activities you do with your friends. In general, over the past year, how often have the following occurred? Circle the answer number that is most true for you.

7 = every day (7 times a week)
6 = 5-6 times a week
5 = 3-4 times a week
4 = 1-2 times a week
3 = less than once a week, 1-3 times a month
2 = less than once a month
1 = never

1. going to school events with friends (dances, sports events, etc) 7 6 5 4 3 2 1
2. spending time with friends outside of school 7 6 5 4 3 2 1
3. having friends over to the house 7 6 5 4 3 2 1
4. going out to parties, movies, etc with friends 7 6 5 4 3 2 1
5. your parents wanting you to do things with the family when you want to do things with friends 7 6 5 4 3 2 1

The next set of questions asks you about your relationships with friends and activities your friends might have done in the past year. Circle the answer number that is most true for you.

5 = all of my friends
4 = most of my friends
3 = some of my friends
2 = only a few of my friends
1 = none of my friends

HOW MANY OF YOUR FRIENDS

6. have your parents approved of in the past year? 5 4 3 2 1
7. have better relationships with their parents than you do? 5 4 3 2 1
8. skip school without their parents' knowledge? 5 4 3 2 1
<table>
<thead>
<tr>
<th>HOW MANY OF YOUR FRIENDS</th>
<th>all</th>
<th>most</th>
<th>some</th>
<th>few</th>
<th>none</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. have run away from home?</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>10. have taken something from a store without paying for it?</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>11. carry a phony ID card?</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>12. break street lamps or windows?</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>13. drink wine, beer, or other alcohol?</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>14. get drunk?</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>15. have physical fights with other people?</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>16. smoke marijuana?</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
In the past two months or so (since August), how often have you had the following experiences? Circle the answer number that is most true for you.

1. trouble sleeping at night

2. no appetite

3. crying spells

4. being tired during the day

5. having headaches, upset stomachs, or constipation

6. difficulty doing schoolwork

7. spending time alone

8. experiencing depression

9. feeling relaxed and "yourself" with one or both parents

10. feeling relaxed and "yourself" with no one

11. being understood by one or both parents

12. being understood by no one

<table>
<thead>
<tr>
<th></th>
<th>7 = every day (7 times a week)</th>
<th>6 = 5-6 times a week</th>
<th>5 = 3-4 times a week</th>
<th>4 = 1-2 times a week</th>
<th>3 = less than once a week, 1-3 times a month</th>
<th>2 = less than once a month</th>
<th>1 = never have had these experiences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
This next set of questions are groups of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describes the way you have been feeling in the PAST TWO WEEKS, INCLUDING TODAY! Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

1. 0. I do not feel sad.
   1. I feel sad.
   2. I am sad all the time and I can't snap out of it.
   3. I am so sad or unhappy that I can't stand it.

2. 0. I am not particularly discouraged about the future.
   1. I feel discouraged about the future.
   2. I feel I have nothing to look forward to.
   3. I feel that the future is hopeless and that things cannot improve.

3. 0. I do not feel like a failure.
   1. I feel I have failed more than the average person.
   2. As I look back on my life, all I can see is a lot of failures.
   3. I feel that I am a complete failure as a person.

4. 0. I get as much satisfaction out of things as I used to.
   1. I don't enjoy things the way I used to.
   2. I don't get real satisfaction out of anything anymore.
   3. I am dissatisfied or bored with everything.

5. 0. I don't feel particularly guilty.
   1. I feel guilty a good part of the time.
   2. I feel quite guilty most of the time.
   3. I feel guilty all of the time.

6. 0. I don't feel disappointed in myself.
   1. I am disappointed in myself.
   2. I am disgusted with myself.
   3. I hate myself.

7. 0. I don't have any thoughts of killing myself.
   1. I have thoughts of killing myself, but I would not carry them out.
   2. I would like to kill myself.
   3. I would kill myself if I had the chance.

8. 0. I am no more irritated now than I ever am.
   1. I get annoyed or irritated more easily than I used to.
   2. I feel irritated all the time now.
   3. I don't get irritated at all by the things that used to irritate me.
9. 0. I have not lost interest in other people.
   1. I am less interested in other people than I used to be.
   2. I have lost most of my interest in other people.
   3. I have lost all of my interest in other people.

10. 0. I make decisions about as well as I ever could.
    1. I put off making decisions more than I used to.
    2. I have greater difficulty in making decisions than before.
    3. I can't make decisions at all anymore.

11. 0. I don't feel I look any worse than I used to.
     1. I am worried that I am looking old or unattractive.
     2. I feel that there are permanent changes in my appearance that make me look unattractive.
     3. I believe that I look ugly.

12. 0. I can work about as well as before.
     1. It takes an extra effort to get started at doing something.
     2. I have to push myself very hard to do anything.
     3. I can't do any work at all.

13. 0. I haven't lost much weight, if any, lately.
     1. I have lost more than 5 pounds.
     2. I have lost more than 10 pounds.
     3. I have lost more than 15 pounds.
     I am purposely trying to lose weight by eating less.
     Yes ____  No ____
For the questions below, please circle the appropriate answer number for each question unless a written space is provided.

1. Sex: (circle number)
   1. male
   2. female

2. Age:
   _____ years old

3. Height:
   _____ feet _____ inches

4. Weight:
   _____ pounds

5. What is your father's highest level of education?
   1. less than a high school education
   2. some high school
   3. completed high school
   4. some college or technical school
   5. completed college
   6. some graduate work
   7. graduate degree (M.A., M.D., Ph.D., L.L.D., etc)

6. What is your mother's highest level of education?
   1. less than a high school education
   2. some high school
   3. completed high school
   4. some college or technical school
   5. completed college
   6. some graduate work
   7. graduate degree (M.A., M.D., Ph.D., L.L.D., etc)

7. What is your father's occupation?
   1. not employed
   2. semiskilled or unskilled workman (truck driver, factory worker, etc)
   3. skilled workman or foreman (machinist, carpenter, etc)
   4. farmer
   5. clerical or sales position
   6. owner of a business
   7. professional (teacher, architect, chemist, doctor) or manager (police chief, postmaster, etc)
   8. don't know

8. What is your mother's occupation?
   1. not employed
   2. semiskilled or unskilled worker (hospital aide, factory worker, etc)
   3. skilled workman or foreman (hair stylist, cook, etc)
   4. farmer
   5. clerical or sales position
   6. owner of a business
   7. professional (teacher, registered nurse, doctor, etc) or manager (of a store, etc)
   8. don't know

9. What is your best guess of your family's level of income?
   1. below $6,000
   2. $6,000 - $9,999
   3. $10,000 - $14,999
   4. $15,000 - $19,999
   5. $20,000 - $24,999
   6. $25,000 - $34,999
   7. $35,000 - $49,999
   8. $50,000 or more
   9. I couldn't even guess
10. What is your father's religious preference?
   1. Roman Catholic
   2. Protestant
   3. Jewish
   4. Eastern Orthodox
   5. other
   6. none

11. What is your mother's religious preference?
   1. Roman Catholic
   2. Protestant
   3. Jewish
   4. Eastern Orthodox
   5. other
   6. none

12. What is your religious preference?
   1. Roman Catholic
   2. Protestant
   3. Jewish
   4. Eastern Orthodox
   5. other
   6. none

13. On the average, what have your grades been like during the last year?
   1. D average or failing
   2. about a C-
   3. C
   4. C+
   5. B-
   6. B
   7. B+
   8. A-
   9. A

14. Place a checkmark next to any event that has occurred in the last three years.
   ___ A. Moved
   ___ B. Parents separated
   ___ C. Parents divorced
   ___ D. Death of father
   ___ E. Death of mother
   ___ F. Death of a brother or sister
   ___ G. Death of a family member other than immediate family
   ___ H. Death of a close friend

We would like to know who is living with you at home at the present time.

15. Parents (place a checkmark next to all that are true for you)
   ___ A. mother
   ___ B. stepmother
   ___ C. father
   ___ D. stepfather

16. Brothers (fill in the ages of your brother(s) in the spaces below. Leave blank if you have none).
   ___ ___ ___ ___

17. Stepbrothers (fill in the ages of your stepbrother(s) in the spaces below. Leave blank if you have none).
   ___ ___ ___ ___

18. Sisters (fill in the ages of your sisters in the spaces below. Leave blank if you have none).
   ___ ___ ___ ___

19. Stepsisters (fill in the ages of your stepsister(s) in the spaces below. Leave blank if you have none)
   ___ ___ ___ ___

20. Place a checkmark next to any other people living with you now.
   ___ A. grandmother (mother's mother)
   ___ B. grandfather (mother's father)
   ___ C. grandmother (father's mother)
   ___ D. grandfather (father's father)
   ___ E. aunt
   ___ F. uncle
   ___ G. cousin(s)
   ___ H. other (who? _______________)

21. If you have none, you need not fill in the spaces.
APPENDIX B1

F Values on ANOVAs of Composite Variables
by High School

<table>
<thead>
<tr>
<th>Composite Variables</th>
<th>F Value</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closeness to Mother</td>
<td>.07</td>
<td>.93</td>
</tr>
<tr>
<td>Closeness to Father</td>
<td>.78</td>
<td>.46</td>
</tr>
<tr>
<td>Closeness to Most Favorite Sibling</td>
<td>.49</td>
<td>.61</td>
</tr>
<tr>
<td>Closeness to Least Favorite Sibling</td>
<td>.65</td>
<td>.52</td>
</tr>
<tr>
<td>Support from Mother</td>
<td>1.15</td>
<td>.32</td>
</tr>
<tr>
<td>Support from Father</td>
<td>1.96</td>
<td>.14</td>
</tr>
<tr>
<td>Support from Most Favorite Sibling</td>
<td>.07</td>
<td>.93</td>
</tr>
<tr>
<td>Support from Least Favorite Sibling</td>
<td>2.22</td>
<td>.11</td>
</tr>
<tr>
<td>Marital Conflict</td>
<td>1.74</td>
<td>.18</td>
</tr>
<tr>
<td>Ineffective Parent-Child Interactions</td>
<td>.25</td>
<td>.77</td>
</tr>
<tr>
<td>Scapegoating</td>
<td>.15</td>
<td>.86</td>
</tr>
<tr>
<td>Parental Child</td>
<td>.64</td>
<td>.53</td>
</tr>
<tr>
<td>Status Offenses</td>
<td>.18</td>
<td>.84</td>
</tr>
<tr>
<td>Delinquent Activities</td>
<td>.76</td>
<td>.47</td>
</tr>
<tr>
<td>Drinking Behavior</td>
<td>.24</td>
<td>.79</td>
</tr>
<tr>
<td>Closeness to Friends</td>
<td>1.57</td>
<td>.21</td>
</tr>
<tr>
<td>Support from Friends</td>
<td>.62</td>
<td>.54</td>
</tr>
<tr>
<td>Activities with Friends</td>
<td>2.12</td>
<td>.12</td>
</tr>
<tr>
<td>Status Offenses by Friends</td>
<td>.43</td>
<td>.68</td>
</tr>
<tr>
<td>Delinquent Activities by Friends</td>
<td>1.01</td>
<td>.36</td>
</tr>
<tr>
<td>Drinking Behavior by Friends</td>
<td>1.15</td>
<td>.32</td>
</tr>
<tr>
<td>Behavioral Depression</td>
<td>2.21</td>
<td>.11</td>
</tr>
</tbody>
</table>
APPENDIX B2

F Values of ANOVAs on Family Structure Composite Variables by Sex, SES, and Marital Status

<table>
<thead>
<tr>
<th>Composite Variables</th>
<th>Sex</th>
<th></th>
<th></th>
<th>SES</th>
<th></th>
<th></th>
<th>Marital Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>p</td>
<td>F</td>
<td>p</td>
<td>F</td>
<td>p</td>
<td></td>
</tr>
<tr>
<td>Closeness to Mother</td>
<td>.02</td>
<td>.90</td>
<td>.44</td>
<td>.65</td>
<td>2.42</td>
<td>.09</td>
<td></td>
</tr>
<tr>
<td>Closeness to Father</td>
<td>.41</td>
<td>.52</td>
<td>1.32</td>
<td>.27</td>
<td>4.87</td>
<td>.008*</td>
<td></td>
</tr>
<tr>
<td>Closeness to Most Favorite Sibling</td>
<td>.03</td>
<td>.87</td>
<td>1.93</td>
<td>.12</td>
<td>.92</td>
<td>.40</td>
<td></td>
</tr>
<tr>
<td>Closeness to Least Favorite Sibling</td>
<td>.002</td>
<td>.97</td>
<td>.11</td>
<td>.90</td>
<td>.47</td>
<td>.63</td>
<td></td>
</tr>
<tr>
<td>Support from Mother</td>
<td>17.56**</td>
<td>.001**</td>
<td>.80</td>
<td>.45</td>
<td>.51</td>
<td>.60</td>
<td></td>
</tr>
<tr>
<td>Support from Father</td>
<td>1.29</td>
<td>.26</td>
<td>1.24</td>
<td>.29</td>
<td>9.44</td>
<td>.001**</td>
<td></td>
</tr>
<tr>
<td>Support from Most Favorite Sibling</td>
<td>1.27</td>
<td>.25</td>
<td>.35</td>
<td>.71</td>
<td>.68</td>
<td>.37</td>
<td></td>
</tr>
<tr>
<td>Support from Least Favorite Sibling</td>
<td>2.56</td>
<td>.11</td>
<td>.41</td>
<td>.66</td>
<td>.09</td>
<td>.91</td>
<td></td>
</tr>
<tr>
<td>Marital Conflict</td>
<td>2.65</td>
<td>.10</td>
<td>1.28</td>
<td>.28</td>
<td>.14</td>
<td>.87</td>
<td></td>
</tr>
<tr>
<td>Ineffective Parent-Child Interactions</td>
<td>2.62</td>
<td>.10</td>
<td>2.39</td>
<td>.09</td>
<td>2.16</td>
<td>.12</td>
<td></td>
</tr>
<tr>
<td>Scapegoating</td>
<td>.02</td>
<td>.88</td>
<td>1.69</td>
<td>.19</td>
<td>2.17</td>
<td>.12</td>
<td></td>
</tr>
<tr>
<td>Parental Child</td>
<td>.05</td>
<td>.82</td>
<td>.34</td>
<td>.71</td>
<td>.54</td>
<td>.59</td>
<td></td>
</tr>
</tbody>
</table>

*p < .01

**p < .001