Self-Report Measures of Family Hierarchy: Construct and Predictive Validity

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SELF-REPORT MEASURES OF FAMILY HIERARCHY: CONSTRUCT AND PREDICTIVE VALIDITY

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The Faculty of the Department of Psychology
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In Partial Fulfillment
Of the Requirements for the Degree of
Master of Arts

by
Richard J. Wilson
1989
This thesis is submitted in partial fulfillment of the requirements for the degree of Master of Arts.

Approved, July 1989

Michael Rohrbaugh

John Nezlek

Neill P. Watson
DEDICATION

This thesis is dedicated to my father, who taught me to keep the faith.
ACKNOWLEDGEMENTS

I would like to thank my advisor Michael Rohrbaugh for his guidance and constant attention to detail. I would also like to thank John Nezlek because, in his own inimitable fashion, he has helped me develop a sense of the importance of ideas and the worthiness of their pursuit. Finally, I want to thank Kate for her boundless support and encouragement over the course of this project.
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ABSTRACT

The family therapy literature has widely hypothesized that clear generational boundaries in the family hierarchy are associated with better functioning of the family and its individual members. Hierarchy has been conceptualized in terms of alliance/coalition patterns (a triadic conceptual unit) and in terms of collapse or reversal of executive and caretaking roles (a dyadic conceptual unit). Primary alliances represent situations in which two family members have, for example, the closest or strongest relationship, or share common interests or goals with each other more than with anyone else in the family. Coalitions generally represent the joint action of two family members against a third family member. Parent-child roles refer to the activities engaged in by pairs of family members, particularly with regard to who is in charge and who takes care of whom. The present research examined college students' perceptions of hierarchy by developing self-report measures representing triadic alliance/coalition patterns and dyadic role reversal. The two main purposes of the study were to describe the empirical relationships between the measures drawn from different conceptual domains, and to examine the relationship between hierarchy and students' adjustment to college. The general strategy employed began with factor analysis of items within hierarchical domains. The results of these factor analyses were then used to guide the construction of composite variables within each domain. The construct validity of the resulting composite hierarchy variables was assessed by examining the correlations of the respective variables within the hierarchy domains of alliances, coalitions, and parent-child roles. The correlations of composite variables between hierarchy domains were also examined. Predictive validity was investigated by using correlational and regression analyses to examine the relationship between hierarchy measures and representative adjustment variables from the categories of academic performance, social relationships, help-seeking, and homesickness or difficulty being away from home.

The results indicated that the hierarchical domains demonstrated decreasing construct validity from the alliance domain, to coalitions, to parent-child roles. Across domains, the different hierarchy measures generally related to one another in expected ways based on whether they were intended to represent breached or maintained hierarchy. In general, the best predictors of adjustment were measures from the alliance and coalition domains. For males, alliance/coalition measures showed the most significant relationships with consideration of counseling, while for females alliance/coalition measures were most important in relation to homesickness and academic satisfaction. Hierarchy measures in the parent-child roles domain were primarily important in relation to homesickness for females.
SELF-REPORT MEASURES OF FAMILY HIERARCHY: CONSTRUCT AND PREDICTIVE VALIDITY
INTRODUCTION

A great deal has been written in the family therapy literature about the importance of generation lines in the family hierarchy. In general, it has been hypothesized that clear generational boundaries are associated with better functioning of the family and its individual members. A closer examination of the literature, however, indicates that family hierarchy has been conceptualized in at least two fundamentally different ways. The first way that hierarchy has been represented is in terms of alliance and coalition patterns (a triadic conceptual unit), and the second way is in terms of the collapse or reversal of executive and caretaking roles (a dyadic conceptual unit). Relevant empirical research, employing both observational and self-report methodologies, can also be organized according to these two conceptual approaches to hierarchy.

The present research examined college students' perceptions of hierarchical family relationships, employing measures constructed to represent both triadic alliance/coalition patterns and dyadic role reversal. The purpose was, first, to describe empirical relationships between self-report measures drawn from different conceptual domains, and second, to examine the relationship between measures of hierarchy and students' adjustment at college.

Conceptions of Family Hierarchy

In contrast to psychodynamic, behavioral, and existential theories that emphasize characteristics of the individual, organizational/systems approaches postulate that individuals are best understood in terms of the interactional systems in which they participate (Hoffman, 1981). From this viewpoint, a person's individual level of functioning is inextricably interwoven with the current organization of family relationships. Haley (1980) states that "...all learning animals organize and cannot avoid doing so. The organizations are hierarchical in form" (p. 19). The form that the family hierarchy takes is based on the "structure" of the family when structure is defined as "...the invisible set of functional demands that organizes the way in which family members interact. A family is a system that operates through transactional patterns" (Minuchin, 1974, p. 51). Family structure is an abstraction based on these transactional patterns. Over time, the repetition of transactional sequences between family members defines how, when, and to whom one relates. These repetitive transactional patterns in the family hierarchy can be described in terms of boundaries. Minuchin (1974)
describes boundaries as "...the rules defining who participates, and how" (p. 53). Generational lines are salient, natural dividers in families, and thus are particularly important in determining the boundaries that are established (Teyber, 1981). Several family therapy theorists have hypothesized that maintenance of the boundaries between generations is an essential element in effective family functioning (e.g. Bowen, 1978; Haley, 1980; Minuchin, 1974; Teyber, 1981). It will be argued here that breached family hierarchy can be defined in terms of two important areas: collapse/reversal of parent-child roles and alliance/coalition patterns.

Wood and Talmon (1983) discuss the concept of boundary in a way that, while differing significantly from the perspective of this paper, still provides information relevant to collapse/reversal of roles in the family hierarchy, and alliance/coalition formation. Wood and Talmon maintain that one boundary dimension is "proximity", or interpersonal boundaries of involvement/uninvolvement. They refer to another boundary dimension as "hierarchy". Their position differs from the present paper in two important ways. First, they do not draw a clear distinction between collapse/reversal of roles in the hierarchy and alliance/coalition formation. Second, they argue that interpersonal proximity constitutes a domain that is distinct from, or orthogonal to, generational hierarchy (Wood, 1985). This paper will maintain that while the distinction is a useful one, it should not be viewed rigidly because patterns of proximity can also be important components of generational hierarchy, especially with regard to alliance/coalition formation.

In their discussion of hierarchy Wood and Talmon describe three areas that can be adapted specifically to collapse/reversal of generational roles. First, parents are expected to nurture children and take responsibility for their welfare. A reversal in the hierarchy would be indicated by the opposite - children nurturing their parents. Second, parents are expected to control and set limits on their children's behavior. Third, parents consider each other peers, but are not peers to their children. For example, certain topics would not be seen as appropriate conversation for parent and child, such as the sexual relationship of the parents.

Another important hierarchical category throughout the family therapy literature is that of alliance/coalition patterns. The terms alliance and coalition have been widely used in the family therapy literature to describe important aspects of family hierarchy, especially with regard to the clarity of subsystem boundaries. A coalition is described as a joint action of two persons against a third (Haley, 1967). Clearly, then, a coalition is triadic because it must involve three persons. An alliance is described as a situation in which two persons share a common interest or goal reflected by such activities as spending time together and sharing personal information and feelings. An alliance may be dyadic if one is limiting discussion to an aspect of the relationship between two people without relating it to anyone else. For
example, one could speak of a common interest two family members have without relating it to the interests of any other family members. On the other hand, an alliance could be conceptualized as triadic if regarded as a "primary" alliance. For example, two people could be considered to have the strongest alliance relative to any third family member. In this case the primary alliance can only be determined if the relationships between at least three persons are considered. The literature has shown a proclivity toward interchanging these terms but for the purposes of this paper alliance and coalition will be treated as descriptive of aspects of hierarchy that are clearly different.

Wood and Talmon's (1983) discussion of proximity - the interpersonal (as opposed to intergenerational) boundaries between family members - provides the basis for specific areas in which alliances and coalitions can be formed. Wood and Talmon borrow the concept of "territorial preserve" from Goffman (1971), who described social (or family) organization in terms of the patterned distribution of claims over physical and psychological territories. For Wood and Talmon, the nature of a relationship is revealed by the degree of overlap between, or sharing of, territories by people. Wood (1981) identified six relevant territories: contact time, personal space, emotional space, information space, conversation space, and decision space. Contact time is simply the amount of time spent together and the way that the time is spent. The degree to which family members touch or hug each other indicates their willingness to share personal space, the territory which is composed of one's body and the space immediately surrounding it. Emotional space refers to the way in which affect or mood can spread between family members. Information space is conceptualized as each person's thoughts, feelings, opinions, behavior, and biographical data. Information space reflects "who knows what about whom". Conversation space indicates the way in which certain family members may share private conversations with each other. Wood and Talmon state that conversation space can vary from information space because families can "Share all information equally among members but still break up into subsystem or dyadic conversation groups" (Wood and Talmon, 1983). Finally, decision space refers to the kinds of decisions made and by whom - individuals, dyads, or the entire family. It is important to emphasize that the present paper is proposing that patterns of proximity, as represented by these territories, are another way to define specific areas in which alliance/coalition patterns develop. From the viewpoint of this paper there are rules defining who participates in what subsystem with regard to interpersonal issues, just as there are rules about other issues such as who is in charge. A case in which proximity (as measured by any of these territories) between generations exceeds that within generations would reflect a dysfunctional hierarchy.

A good example of a coalition demonstrating hierarchical problems is the situation in which generational boundaries are crossed and a "perverse triangle" is formed (Haley, 1967).
Characteristically, such a triangle is composed of two people of different generations who form a covert coalition against a third person. For instance, an overprotective mother might join with a child in such a way that the father's attempts at discipline are undermined; a parent might talk with a child about the other parent's drinking problem; or a seemingly uninvolved father could covertly encourage a child's rebellion against mother. The perverse triangle is an example of the two against one quality that typifies coalitions; moreover, it illustrates the dysfunction associated with cross-generational coalitions. Haley views the perverse triangle as a general organizational phenomenon that is not limited to families. Thus, "generation" can refer not only to status differences between parents and children, but also to different positions in a power hierarchy as with managers and employees or faculty members and graduate students.

Children can become crucial elements in protecting and stabilizing the equilibrium of the family by becoming the third point in a perverse triangle. There may be many reasons for a child's involvement in a perverse triangle. For example, a son might become overly close with a neglected mother in an attempt (that may or may not be conscious) to comfort her, to protect father from demands that might be beyond his capability, or to act as a buffer in marital discord (Hoffman, 1981). The basic problem, though, is that a child is caught between parents by virtue of his/her coalition with one of them. This cross-generational involvement is often associated with dysfunctional behavior on the part of the triangled child. Hoffman provides an organizational explanation of the apparent localization of symptoms in the triangled child by hypothesizing that the symptoms are developing (in a more expendable party - the child) when problems arise in the relationship between two other essential parties (the parents). In this formulation, then, problem behavior is meaningful or performs a function when considered in the context of the interactions of family members.

A specific situation in which the relationship between individual functioning and hierarchy is underscored occurs when the developmental task faced by the family involves the launching of an adolescent. Haley (1980) maintains that when a child begins to succeed outside the home those successes are both a matter of individual achievement and a signal that the child is disengaging from the family. Involvement in a cross-generational coalition can block these kinds of independent successes because of the consequences they have for the entire family system. Thus, problem behavior, or simple difficulties developing independence, can be tied to the larger family context and will be particularly significant at a time such as when a child leaves home for college.

To summarize, the family is an organization in which members align themselves in meaningful ways in relation to one another. In well functioning families, the form of this organization is a hierarchy with clearly defined generation boundaries, especially with regard
to interpersonal proximity and the differentiation of parent-child roles. Thus, key elements of theory and research can be formulated into an overarching framework helpful in guiding the study of family hierarchy (Rohrbaugh, 1985). In this framework hierarchy is examined in terms of alliance and coalition patterns on one hand, and the differentiation of executive or caretaking parent-child roles on the other. The former implies a triadic conceptual unit and the latter a dyadic conceptual unit.

With regard to alliances and coalitions, it is important to distinguish cross-generational primary alliances from cross-generational coalitions. The major difference is that coalitions have a two-against-one quality. A primary alliance can be considered to be triadic because even in speaking of the quality of a two person bond one is by definition considering it relative to other bonds that could be formed with third parties. Thus, both coalitions and primary alliances are triadic in nature and can be examined on a number of different dimensions.

The differentiation of hierarchical roles can be further divided into two main areas: collapse or reversal of executive functioning (who's "in charge"), and collapse or reversal of caretaking or nurturance (who "takes care of" whom). As will be shown, this distinction has been reflected in the literature by studies such as Madanes et al's (1980) that focused on the executive "in charge" dimension and Walsh's (1979) that primarily examined the caretaking dimension. In contrast to alliance/coalition patterns, the differentiation of hierarchical roles involves a dyadic conceptual unit based on the activities engaged in or not engaged in by two individuals, without requiring reference to a third. Analysis in terms of parent-child roles considers whether the interactions between two people are consistent or inconsistent with their respective positions in the hierarchy. Certain roles are appropriate for parent-child dyads because they maintain hierarchy, while other roles are inappropriate because they involve individuals in activities that breach hierarchical boundaries.

Research on Family Hierarchy

Family hierarchy, and its relationship to the functioning of individual family members, has been studied mainly by comparing "clinic" families, those in which a family member has presented as problematic, to "normal" families whose members are not experiencing any particular problems. Such studies have provided some empirical basis for the importance of the family hierarchy. A wide range of measures, including observer ratings of family interaction, projective tests, and self-reports, have been used with such groups as schizophrenics (Mishler and Waxler, 1975; Walsh, 1979), heroin addicts (Madanes, Dukes & Harbin, 1980), neurotics (Shepperson, 1981), and assaultive adolescents (Madden and Harbin, 1983). Research that is directly relevant to the present study has examined alliance patterns in the families of college students on academic probation (Teyber, 1983a & 1983b; Wilson and Rohrbaugh, 1985).
Relevant research can be categorized according to the two ways of conceptualizing hierarchy already discussed: triadic alliance/coalition patterns and collapse/reversal of dyadic hierarchical roles. Research within each of these broad areas can be further categorized according to whether it employs primarily behavioral (observational) methods or self-report methods to measure hierarchy.

**Studies Examining Differentiation of Parent-Child Roles**

Differentiation of parent-child hierarchical roles has been studied using both observational and self-report methodologies. A study in which an observational approach was used examined the relationship between generational hierarchy and psychological dysfunction, using families that came to a clinic because of difficulties with a child (Wood, 1985). Hierarchy was conceptualized in terms of the concepts of nurturance (parents nurture children), control (parents are in charge of children), alliances/coalitions, and peers (parents are normatively peers with other adults but not with children). The families' interactions during an arranged lunch were videotaped and coded based on the conceptual categories outlined above. An interview was also conducted using an instrument that was also based on the categories developed for interaction coding. Each parent completed Achenbach's Child Behavior Check List. The results indicated that the weaker the hierarchy, that is, the greater the tendency toward collapse/reversal of hierarchical roles and cross generational alliances and coalitions, the greater the index of psychopathology (from the Behavior Check List) for both the identified patient and his/her siblings.

Dyadic collapse or reversal of hierarchical roles has also been studied using subjects' direct self-report in order to compare clinical and non-clinical populations. Madanes, Dukes, and Harbin (1980), developed a quasi-projective self-report technique in order to study the hierarchy of normal families, families with a schizophrenic member, and families with a heroin addict. This "Hierarchy Test" involves the manipulation of stick figures that represent family members in order to indicate which family members are in charge. The main hypothesis studied was that in addict families there would tend to be reversals of the usual hierarchical organization of families. A "reversal" was a dyadic formulation of hierarchy in which the parental generation was not in a higher position in the hierarchy than the offspring generation. For example, the case in which a parental person was put at a level below an offspring was considered a reversal. It was found that addict families more frequently indicated a reversal in the hierarchy, followed by schizophrenic families and normals. This study, then, focused on reversals of executive functioning in the hierarchy.

Another study in which the Madanes Hierarchy Test was used demonstrated that the families of assaultive adolescents were more likely to exhibit hierarchical reversals (Madden & Harbin, 1983). Once again these hierarchical reversals were in relation to executive
functioning (when discussed) in terms of who is in charge in the family. The Hierarchy Test has also differentiated between overweight and normal weight college students, with the former indicating more instances of collapse/reversal of hierarchy in terms of both executive and caretaking roles (Washichin & Rohrbaugh, 1987). Preli and Protinsky (1988) used the Hierarchy Test to differentiate between families that included an alcoholic (the father) and those that did not. The results showed that the families of the alcoholic were significantly more likely to indicate a hierarchical reversal as representative of the family. The most likely choice was the placing of mothers and children on the same level, either superior or inferior to the alcoholic father. This was interpreted in terms of the oft cited clinical observation that children are likely to be involved in hierarchically inappropriate caretaking roles in alcoholic families, usually with the nonalcoholic spouse.

Indirect self-report, in the form of responses to projective tests, has also been used to study collapse or reversal of hierarchical roles. Walsh (1979) analyzed the Thematic Apperception Test (TAT) stories of normal, schizophrenic, and nonschizophrenic psychiatric control families. She found that mothers, fathers, and children in schizophrenic families produced more "child as mate" and "child as parent" themes than the members of the other two types of families. In addition there were no differences within schizophrenic families as to who produced these themes, even when love triangles or involvement of a clearly sexual nature was described. This research is a provocative demonstration of the reversal or collapse of normal executive and caretaking hierarchical roles.

McCormick (1987) broadened the scope of the study of hierarchy by including both direct and indirect methods of assessment. She used the TAT, the Ferreira-Winter Questionnaire (FWQ), and the Family Hierarchy Test in order to examine the usefulness of executive and nurturance aspects of hierarchy in discriminating between clinical and nonclinical families. The sample was composed of 15 clinic and nonclinic families respectively, including mother, father, and an index child. The aspects of hierarchy that discriminated the groups were: mother's TAT stories scored for appropriate executive hierarchy, inappropriate executive hierarchy, and cross-generational coalitions; mother's hierarchical reversals on Family Hierarchy Test nurturance questions; and unanimous and chaotic executive decision making on the FWQ. It must be noted, though, that there were an additional 25 variables derived from the instruments used that did not discriminate groups, as well as 4 variables that discriminated in a direction contrary to expectations.

Studies Examining Alliance/Coalition Patterns

A study by Mishler and Waxler (1975) illustrates the investigation of coalition patterns. The interactions of the families of schizophrenics and normals were observed and the occurrence of sequential communications between parents that were uninterrupted by the
child was used as a measure of coalitions. Mishler and Waxler found that in normal families there were more instances of mother-father coalitions as represented by parents who were able to talk to one another without being interrupted by children.

Coalition patterns were also studied in another observational study that compared clinic families and normal families (Shepperson, 1981). The coalition structure of normal and neurotic or moderately disturbed families was compared by videotaping their interactions during a structured task. The assumption was made that frequency and duration of eye contact and the number of verbal statements from one person to another would reflect coalition structure, that is, longer and more frequent verbal and nonverbal communication was postulated to indicate a stronger coalition. The results indicated that the normal families displayed more verbal and non-verbal communication between mother and father than there was in the moderately disturbed families. This was interpreted to mean that the parental coalition was stronger in the normal families than in the moderately disturbed families. For both types of families though, the parental dyad showed the greatest amount of verbal and nonverbal communication relative to the mother-child and father-child dyads. Given the criteria of this study then, both types of families had primary parental coalitions, even though the coalition in the normal families seemed stronger. The use of the term “coalition” in this study is questionable because measures were used that do not necessarily capture the two against one quality. Still, the study does illustrate that dyads can be analyzed in a way that reflects the primacy of the parental dyad relative to other dyads. Such an analysis is actually triadic because it involves the comparison of relationships between three people - mother, father, and child.

Self-report has also been used to examine the relationship between alliance patterns and college students’ adjustment (Teyber, 1983b). A questionnaire and interview were used to gather information about alliance patterns. In addition, students completed Constantinople’s Ericksonian measure of personality development and the Eysenck Personality Inventory to provide measures of adjustment. It was hypothesized that students who indicated that the primary alliance was parental would be better adjusted than those who did not. The normative data revealed that only 46% of the male subjects and 35% of the females indicated that the primary bond in the family was parental. It was also found that females had a greater tendency to indicate cross-generational relationships as primary. This reported sex difference may not hold though when the questions that determine alliances are not biased toward the emotional component of family relationships, as Teyber’s were. An additional finding was that if mother and father did not have the primary alliance the most frequent alternative was for mother to have the primary bond with a son or daughter: father was not usually included in a primary bond with anyone if a primary marital alliance did not
develop. If a primary bond did develop between the parents, close relationships between father, mother and children tended to develop also. Teyber suggested that a key reason that the primary marital, or even father-child, relationships did not develop was because the father in such cases was consistently identified as more critical and less supportive. Only limited support was found for the predicted relationship between adjustment and alliance patterns. Females who indicated that the primary alliance in the family was parental were somewhat better adjusted than those who indicated that it was not, but this relationship did not hold for males.

A second study by Teyber (1983b), directly relevant to the present research, examined the relationship between perceived alliance patterns and academic performance by college freshmen. Here, Teyber hypothesized that academic failure would be associated with a dysfunctional hierarchy in which the closest primary alliance was not between the parents, but crossed generation lines. Using an interview technique, Teyber determined the primary alliance in the family, from the student's perspective. The specific question asked was, "Thinking of the bonds of emotional closeness and involvement, what was the primary and most important relationship in your family..." (p. 307). The subjects were 36 freshman males on academic probation who were matched on ethnicity and SAT scores with 36 other freshman who had GPA's greater than 2.50. The results showed that students who had been placed on academic probation were more likely to indicate that the parental relationship was not primary.

Interlocking studies by Wilson and Rohrbaugh (1985) and Peckman (1985) used a self-report methodology similar to Teyber's in an attempt to replicate and extend his work. Students completed a questionnaire that included questions about family relationships, contact patterns, and student adjustment. Eighty-eight freshman and sophomores also participated in a structured interview that explored the same areas in greater depth. Primary alliances were determined in a manner similar to Teyber's except that separate questions were asked about past alliance patterns (when the student was between the age of 8-12) and present patterns. Because current alliance patterns are an important part of the context in which the student is living they should be more predictive of present adjustment. Student adjustment was operationalized in terms of academic success, help-seeking, and satisfaction with social relationships at college, measured by the Revised UCLA Loneliness Scale (Russell, Peplau, & Cutrona, 1980). A factor analysis of the adjustment measures suggested that the three general areas of adjustment were relatively independent of each other, so each was examined separately in relation to the hierarchy measure. The results provided some support for the hypothesized relationship between clarity of generational boundaries and student adjustment. Students who indicated that in the past the primary alliance was not
parental were doing more poorly, especially in terms of their rating of their academic achievement and development of social relationships as measured by the score on the UCLA Loneliness scale. These results are equivocal in that present alliance patterns would be expected to be more important than past patterns in predicting current adjustment.

A related study by Eldridge and Rohrbaugh (1986) also examined college students' adjustment and alliance patterns, and included the perspectives of mother and father. The results suggested that family-level measures that took into account the responses of mother, father, and student were the best predictors of adjustment. Weak parental alliances and skewed parent-child alliances were found to correlate with academic problems.

**Purpose of Present Study**

There were two broad purposes of the present study. The first was to develop a more comprehensive self-report approach to family hierarchy, incorporating measures based on both triadic and dyadic formulations of the construct, as outlined above. To this end, measures of hierarchy representing different conceptual domains were examined to determine whether they fit together empirically in a manner consistent with the framework from which they were devised. The second purpose was to study the relationship between different measures of hierarchy and student adjustment. It was hypothesized that, in general, clear generational boundaries in the hierarchy would be associated with better adjustment.

The methodology of the present study builds directly on Teyber (1983a) and Wilson and Rohrbaugh's (1985) research with college students. In those studies, family hierarchy was examined only in terms of the emotional closeness of particular alliances. In the present study hierarchy was operationalized more broadly, with items developed to correspond to past and present timeframe, as well as to the different conceptual domains in the framework that has been described.

In view of previous research, primary alliance patterns were examined in two overall ways. The first way involved forced choice selections of particular primary alliances on a number of dimensions, for past and present. Again, because the selection is made relative to relationships with at least one other person it is considered triadic as opposed to dyadic. Two extensions of previous research are incorporated into this approach to alliances. First, both past and present primary alliances are determined, allowing a test of the hypothesis that current context is more important than past context in predicting present adjustment. Second, other dimensions beyond the "closest emotional" relationship (e.g., most similar attitudes and interests; most in charge) were included in an attempt to study particular types of alliances.

The second way that alliances were examined was by the comparison of particular dyads. Subjects rated each of three dyads (mother-father, mother-student, father-student)
using: 1) a global valence rating, 2) a set of bipolar adjective scales, and 3) a series of items based loosely on Wood and Talmon's (1983) dimensions of proximity. All of these items were phrased in terms of dyads, but they were analyzed in terms of triads, by generating scores which reflected the primacy of the parental dyad relative to the other two dyads.

In order to study coalition patterns, another set of items was constructed to examine triads representing the degree to which different family members join together against, or to the exclusion of, other family members.

In addition, items were developed that relate to the collapse or reversal of hierarchical parent-child roles. The conceptual unit of these items was dyadic because they were oriented toward the roles in the hierarchy taken by different pairs of individuals. These items tapped the hierarchical congruity of parent-child dyads, especially with regard to the differentiation of executive and caretaking/nurturance roles. Specifically, under the general headings of control, nurturance, and peers, items were phrased in terms of whether executive or nurturance/caretaking hierarchy was maintained or breached. The inclusion of nurturance aspects of hierarchy broadened the scope of the study beyond the executive components that have been highlighted in most family hierarchy studies.

The nature of the hierarchical items used in this study facilitated the development of variables that measured, on scales with interval characteristics, the degree to which generational boundaries were clear. In previous research generational boundaries were most often operationalized in an either/or fashion. For example, parental alliances were either classified as primary or they were not. In the present study, then, it was possible to operationalize clarity of generational boundaries in terms of a continuum running from strong maintenance of generational boundaries to weak. This approach is consistent with the theoretical argument that generational hierarchy reflects a continuum of subsystem boundary permeability (Wood, 1985).

Another important extension in this work was the wider range of adjustment measures that encompassed four general areas - academics, social relationships, help-seeking, and difficulty leaving home ("homesickness"). Homesickness was included because of the prevalence for this sample, composed largely of freshman, of leaving home issues. It was important to determine whether these general areas of functioning would again be found to be relatively independent of each other as they were in the Wilson and Rohrbaugh study. Thus, an attempt was made to obtain the broadest possible view of the student's level of functioning.

Finally, because of the self-report nature of this study, subjects also completed a social desirability inventory (Crowne and Marlowe, 1960), so that the possible influence of social
The general strategy in this study was based on organizing the questionnaire items, a priori, into domains developed from the hierarchical conceptual scheme that has been outlined. The analysis proceeded in stages: First, items associated with different hierarchical sub-domains were factor analyzed; the results of these factor analyses were then used to guide construction of empirically distinct composite variables within each domain. The first stage of construct validation consisted of an examination of the correlations of composite hierarchy variables within the hierarchy domains of alliances, coalitions, and parent-child roles, respectively. Adjustment measures were also factored at this stage in order to select criterion measures. The second stage of construct validation involved an examination of the correlations of composite hierarchy variables between hierarchy domains. Predictive validity was assessed using correlational and regression analyses to study the relationship between hierarchy measures and measures of student adjustment. These analyses determined whether there was a significant relationship between adjustment and hierarchy and the amount of variability in adjustment explained by the hierarchy measures, with social desirability response set and student demographics statistically controlled.
METHOD

Subjects and Procedure

The Family Background Questionnaire II (FBQ II), a revision and elaboration of a
questionnaire developed by Wilson and Rohrbaugh (1985), was distributed to all students
enrolled in introductory psychology classes at the College of William and Mary in the Spring of
1985. The complete questionnaire is reproduced in Appendix A. Students were asked to fill
out and return the questionnaire at their convenience. The instrument included demographic
questions; questions related to family membership, structure, and configuration; and
questions related to student adjustment. Of the 700 questionnaires distributed, 411 were
returned.

Subjects included in the analyses were freshman and sophomores between the ages of
17 and 21 whose parents were both living and had never separated or divorced. Of the 315
students who met these requirements, 113 were male and 202 were female. The mean age
of these subjects was 18.7 years; there were 205 freshman and 75 sophomores. The
subjects were predominately (89%) white, Catholic (32.7%), or Protestant (55.3%), and from
families with incomes of $30,000 or more (90%). The mean number of children in these
families, not including the subject, was 1.9. Most subjects were the oldest in the family
(N=125, 40.3%), followed by youngest (N=97, 31.3%), middle (N=72, 23.2%), and only child
(N=16, 5.2%). Five subjects did not indicate their sibling position.

Measurement Domains

The FBQ II items were organized into three broad domains incorporating measures of
family hierarchy, student adjustment, and other control variables, such as social-desirability
response set and student demographics. The hierarchy domain was further divided into the
sub-domains of primary - parental alliance patterns, coalition patterns, and collapse/reversal of
parent-child roles.

Primary Parental Alliances

Forced Choice Alliances. The forced choice format was similar to that used by Teyber
(1983a and 1983b) and Wilson and Rohrbaugh (1985). From a list of nine family dyads,
students chose the two family members who (a) had the strongest overall relationship; (b)
were closest emotionally; (c) made most of the decisions (were most in charge); (d) had the
most similar attitudes and interests; (e) were most likely to know what each other was thinking;
and, (f) spent the most time together. Possible responses were: mother-father, mother-self,
father-self, mother-brother/sister, father-brother/sister, brother/sister-self, brother/sister-brother/sister, mother-her mother/father, father-his mother/father. Whereas Teyber and Wilson and Rohrbaugh asked only about the "closest" relationship, the present forced choice procedure attempted to tap a number of different dimensions on which alliances might vary. Questions about the six dimensions were asked twice: once to represent present-primary alliances (at the time of the study), and again to tap past alliances (when the subject was 8-12 years old). Responses to each of the forced choice items were coded in terms of whether or not the primary alliance was between the parents. If, on factor analysis, subjects were not differentiating between dimensions, new measures would be developed based on collapsing across dimensions and determining the number of times a particular dyad (e.g., mother-father) was nominated. Such a measure would provide an indication of the prevalence of particular dyads across dimensions. Furthermore, factor analysis determined whether subjects were differentiating between past and present alliance patterns, or whether these were combined.

Dyad Comparison of Primary Alliances. In contrast to the forced-choice method, dyad comparison measures of primary alliance were based on the relative ratings of proximity in three nuclear family dyads: student-mother, student-father, and mother-father. In general, these ratings were used to derive a measure of the primacy of the parental relationship. Subjects answered a series of questions about each of these relationships, beginning with a global valence rating of their individual relationship with mother and father separately, on a seven point scale running from -3 to +3. They then rated their parents’ relationship on the same scale. Next, they rated the same relationships on more specific bipolar adjective scales. Each relationship was rated on a seven point scale as to how distant-close, weak-strong, and conflictual-harmonious it is, yielding a total of 9 ratings.

The FBQ II also included twenty-one items based loosely on Wood and Talmon’s formulation of proximity in terms of boundaries of contact, personal space, emotional space, information space, conversation space, and decision space. These items were also organized so that particular dyads (mother-father, mother-student, father-student) could be compared to give an index of hierarchical proximity. All of these items were used to make dyad comparisons yielding continuous variables represented by a score equal to the actual amount of difference between the rating of the parental relationship and the highest rated individual relationship between the subject and either father or mother. More positive numbers, then, were associated with greater relative primacy of the parental relationship, while more negative numbers were associated with decreased relative primacy of the parental relationship. The general plan was to determine how these continuous dyad-comparison variables could be used, alone or in some combination, to construct an index reflecting the
primacy of the parental relationship. Factor analysis determined empirically how this variable or variables would be constructed.

**Coalition Patterns**

Twelve items were developed to represent cross-generational coalitions in the family. These items were organized to reflect explicit, two-against-one coalitions, some crossing generational lines, others not. Factor analysis of these items was later used to determine whether the coalition items should be grouped together as one variable, or whether different groups of items represented empirically distinct coalition patterns.

**Collapse/Reversal of Parent-Child Roles**

Twenty two items were developed to deal with differentiation of hierarchical nurturance/caretaking and executive roles. Some of these items followed from Wood and Talmon's formulation of the categories of nurturance, control, and peers. Cast in dyadic terms, each was intended to reflect either the maintenance of generational hierarchy on one hand, or its reversal or collapse on the other. Again, factor analysis was later used to determine the particular way that these items should be combined - for example, whether nurturance items would be distinct from items associated with executive functioning. The dyad comparison, coalition, and parent-child roles items are listed in Appendix A.

**Student Adjustment**

Measures of student adjustment concerned academic achievement, social relationships, help-seeking, and homesickness.

Three measures related to academics: **GPA**, current grade point average; **academic achievement**, a three-level rating of whether the student's academic achievement in college has been better, about the same, or worse than she or he expected; **academic satisfaction**, satisfaction with academic performance at college so far, rated on a 7-point scale.

There were two measure of help-seeking: **Received counseling**, coded 0 if the student had not received or 1 if they had received counseling at college; and **consideration of counseling** at college, rating on a 7-point scale of how seriously the student has considered counseling since she or he has been at college.

Two measures were made in the area of formation of social relationships: **Intimate peer relationships**, a five-level ordinal variable based on whether the student is (1) not dating at all, (2) dating occasionally, (3) dating regularly, (4) going steady, or (5) either in love, engaged or married); and **social satisfaction**, a rating on a 7-point scale of satisfaction with social relationships formed while at college.

Finally, there was a single item measuring **homesickness**, which was a rating on a 7-point scale of how difficult it has been to be away from home.
In order to decide which of these adjustment measures would be used, and whether they might be combined, they were factor analyzed. A possibility was that the measures would form four dimensions representing the general areas of academics, social relationships, help-seeking, and homesickness.

**Control Variables**

Other measures included selected student demographic variables (age, sex, class, number of siblings in family), and social desirability response set. All subjects completed the Crowne and Marlowe (1960) Social Desirability Scale in order that response set might be measured. Scores on the social desirability scale reflect one's tendency to present herself or himself in a favorable light. It was expected that any or all of these control variables might account for variation in self-report measures of hierarchy and/or student adjustment.
RESULTS

The results section will first present some descriptive data for the forced choice primary alliances so that norms for this study can be compared to previous studies, as well as be examined in relation to the basic assumptions of structural family theory. The key elements of the study - data reduction, and analyses of construct and predictive validity - will then be addressed. The general strategy was to develop variables based on factor analysis of items within the hierarchical domains of alliances, coalitions, and parent-child roles, and examine the construct validity of these variables within and between hierarchical domains. Correlations will then be presented describing the relationships between the control variables and the hierarchy variables resulting from these analyses. The relationship between the hierarchy variables and the adjustment variables, after statistically allowing for relevant control variables, will then be presented.

Descriptive Primary Alliance Data

The forced choice items provide some descriptive data regarding the kinds of primary family alliances that subjects selected most frequently on the different dimensions (i.e., strongest relationship, closest, make most decisions, most similar attitudes, most likely to know what each other is thinking, and spend most time together). For present-primary alliance items, the parental alliance was cited most frequently on all dimensions. The selection of the parental dyad on different dimensions ranged from a high of 92.2% for the question "which two family members make most of the decisions (are most in charge)" to a low of 36.5% for which two "spend most time together". This pattern of selecting the parental dyad most frequently held for both males and females. For the past timeframe, the parental alliance was again nominated most frequently on all dimensions, this time ranging from 97.1% for "made most of the decisions (were most in charge)" to 40.1% for "spent most time together".

These data are consistent with Teyber's results in some ways but not in others. Teyber's results indicated that males alone selected a primary-parental alliance most frequently, and that they did so only 46% of the time. Females selected the mother-father alliance as primary only 35% of the time, which was second in frequency to an alliance involving parent and child (47%). Recall that Teyber's questions were oriented toward the emotional dimension and were phrased in terms of the past. In the present study, on the past "closest emotionally" dimension, the one corresponding most closely to Teyber's, both males (60%) and females (52%) selected the parental dyad most frequently. So, these results are
similar to Teyber's in that males nominate the parental dyad as primary more frequently than other dyads, and dissimilar in that females also nominated the parental dyad most frequently. Structural family relations would predict that in a normal population the parental alliance would be selected most frequently as the primary alliance. The present study provides some support for such a prediction.

Variable Reduction: Relationship Among Items Within Measurement Domains

The strategy for variable reduction within hierarchical measurement domains was to factor analyze each set of items corresponding to alliances (forced choice primary alliances and dyad comparison primary alliances), coalitions, and parent-child roles. In all analyses, factors were extracted using the SPSS-X principal components analysis (Harmon, 1976), with listwise deletion of missing data. The N's for all factor analyses ranged from 265-314. Factors with eigenvalues greater than 1.0 were rotated to a varimax solution. Other rotations were also performed (e.g. oblimin, oblique) but in no case did this substantially alter the pattern of factor loadings.

Forced Choice Primary Alliances. To determine whether it was useful to have separate sets of questions for past and present-primary-parental alliances (PPA), and whether the six items within sets could be reduced to a smaller number of variables for subsequent analyses, a factor analysis was performed on the forced choice items. Each of the 12 forced choice items (6 past, 6 present) was recoded into a dichotomous (dummy) variable based on whether the parental alliance was perceived as primary (coded 1) or non-primary (coded 0). The 12 dichotomous variables were then intercorrelated and factor analyzed. While factor analysis is not usually done using dummy variables, their use here is reasonable on the grounds that the analysis was exploratory, not confirmatory. The principle components analysis yielded three factors with eigenvalues greater than 1.0, accounting for 58% of the total variance.

Table 1 lists items with varimax loadings greater than .40. As can be seen, all of the present forced choice items except the "in charge" item fall on factor one, along with the past "strongest overall relationship" item, and the past "closest overall relationship" item. All of the past forced choice items load on factor two, with the exception of the "in charge" item. Also, the past "strongest overall relationship" item had a somewhat lower loading on factor two than it did on factor one. These two factors suggest, in general, that students' perceptions of past and present alliance patterns were fundamentally distinct, and that within the past and present time frames, subjects were not differentiating between the different dimensions. The third
factor, which includes the past and present "in charge" items, may simply reflect the fact that very few subjects indicated anything but the mother-father dyad on this item.

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Insert Table 1 about here

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Two variables were developed based on the results of this factor analysis. The first (which will be referred to as "forced choice-PPA-present") was a variable derived by counting, across all of the present oriented forced choice items, the number of times the mother-father dyad was nominated. The second variable (forced choice-PPA-past) was similarly calculated, except across all of the past oriented forced choice items. Thus, these variables could range from 0-6 and gave measures of the primacy of the parental dyad, past and present.

The forced choice-PPA-present variable yielded a mean of 3.65 for all subjects, 3.74 for males, and 3.60 for females. For males scores ranged from zero, the lowest possible (N=3, 2.9%), to six, the highest possible (N=24, 23.3%). For females, scores also ranged from zero (N=8, 4.1%), to six (N=42, 21.3%). Even though the mean score for males represented a tendency to nominate the parental dyad more frequently than females, the difference was not statistically significant. The forced choice-PPA-past variable produced a mean of 3.57 for all subjects, 3.54 for males, and 3.59 for females. The range for males extended from a score of zero (N = 4, 1.8%), to a score of six (N=23, 21.5%). For females the range also extended from zero (N=3, 1.5%), to six (N=40, 20.5%). So, the forced choice-PPA variables indicate that males and females nominate the parental dyad to roughly the same degree in both past and present.

**Dyad Comparison-PPA Items.** The primary task in the analysis of the dyad comparison items was to examine the interrelationship among the 3 global valence ratings, the 9 bipolar adjective scales, and the 21 proximity items, and to determine whether they could be collapsed into a summary variable or variables reflecting the primacy of the parental alliance. To accomplish this, a single factor analysis was performed on the ratings of relationship and on the proximity items, comprising a total of 33 items. Table 2 gives the factor loadings for this analysis. Of the six resulting factors, the first three are of interest and account for 58.8% of the variability. These first three factors correspond directly to the three family dyads: all four ratings of the parental relationship and the 7 parental proximity items loaded on factor one, on factor two all four of the ratings of the student's relationship with mother fall with the 7 student-mother proximity items, and on factor three the four ratings of the student's relationship with father fall with the 7 student-father proximity items. These results strongly suggest that
subjects perceived the three nuclear dyads differently, and on that basis it was decided to combine the items related to each dyad into a single measure of the strength/proximity of that dyad.

It was thus possible to calculate a single dyad comparison-PPA variable. This was done by selecting the higher of the two numbers between the mean of the summed father-subject items and the mean of the summed mother-subject items. This mean was then subtracted from the mean of the summed parent-parent items. To reiterate, positive values of this variable indicated primacy of the parental dyad, while negative values indicated primacy of a parent-subject dyad. The actual values for this summary dyad comparison variable ranged from -4.6 to +4.6, with a mean of +0.04. For males the range was from -3.6 to +4.6 with a mean of 0.30. For females the range was from -4.6 to +2.6 with a mean of -0.11. These means for males and females were found to differ significantly (d.f. = 312, t = 3, p < .01). Thus, males were indicating a somewhat stronger-relative parental alliance. The analysis of these items, then, yielded one summary dyad comparison-PPA variable that captured the relative primacy of the parental alliance, from the subject's perspective.

Coalition Items. Recall that these items were developed to examine explicit two-against-one coalitions reflecting both breached or maintained hierarchy. A principal components analysis of the 12 coalition items resulted in four factors, accounting for 66.6% of the total variance, as shown in Table 3. The first factor is composed of all of the gang up items and thus reflects perceptions of family coalitions that involve an explicit two-against-one quality. Factor 2 describes the parental coalition and the degree to which the parents are together with regard to the children, especially in determining and enforcing rules. Factor 3 describes more covert cross-generational coalitions with either mother or father. Finally, factor 4 describes within generation coalitions, either involving mother and father talking about children, or children talking about parents. Summary (composite) variables were developed from each of these factors by averaging the items that loaded clearly on each of the respective factors. Thus, factor 1 became the gang-up coalition variable. The internal reliability of this variable was measured by Cronbach's Alpha at .75. Factor 2 became the parental coalition variable and yielded an alpha of .82. Factor 3 became the cross-generation coalition variable, with an
alpha of .68. Lastly, factor 4 was called the **within-generation coalition** variable, and had an alpha of .32.

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Insert Table 3 about here

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**Collapse/Reversal of Parent-Child Roles.** To reiterate, the parent-child roles items were developed to examine the differentiation in the hierarchy of nurturance/caretaking and executive roles. A principal components analysis of the 22 collapse/reversal items resulted in six factors accounting for 68.7% of the variance. The factor loadings are listed in Table 4. It was important to determine if these factors followed the theoretical framework from which the original items were devised, that is, whether they reflected reversal or collapse of hierarchy either in terms of executive or caretaking functioning.

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Insert Table 4 about here

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Factor 1 mixes items that were intended to reflect maintenance of hierarchy (i.e., "Mother/father takes care of me"; "Father tells me what to do") and items that were also intended to reflect reversal (i.e. "I take care of mother/father"). Thus, it seems that these items, rather than reflecting generational lines, were answered in terms of mutual connectedness with either mother or father. Factor 2 presents a similar picture in that the items were not responded to in terms of the generations, but seem to reflect a mutual caretaking, in this case with father. Factor three is similar to factor two, except that it reflects mutual connectedness between mother and child. Thus, the first three factors suggest that subjects were responding to these items in terms of connectedness as opposed to generational roles. Because connectedness and not hierarchy appears to be the primary organizing theme in factors 1-3, they were not used as hierarchy measures and were dropped from the study.

Factor 4, on the other hand, describes a case in which a child directs parents by giving advice or telling them what to do - clearly a hierarchical reversal factor. Factor 5 also demonstrates reversal in that it includes items relating to equality between generations or a peer-like relationship (e.g. "Mother/father and I are like sisters/brothers"); "Mother/father and I treat each other as equals") instead of a generational hierarchy. Also, two items that would demonstrate hierarchy load negatively on this factor (i.e., "Mother/Father tells me what to do"). Finally, factor 6 includes two items demonstrating the maintenance of parental authority, a clear component of executive functioning (i.e. "Mother's/father's authority is seldom questioned").
The items that loaded clearly on factor 4 composed the child-directs-parents variable, with a Cronbach's Alpha of .81. Factor 5 became the child-as-peer variable, yielding an Alpha of .58. Finally, factor 6 represented the parental authority variable, and produced an Alpha of .66.

To summarize, this factor analysis provided items that could be said to reflect maintenance of generational hierarchy in terms of executive functioning, but not in terms of caretaking. Items oriented toward caretaking or nurturance unexpectedly went together regardless of generational lines, representing proximity or connectedness between mother, father, and child.

**Adjustment Measures.** Turning to the adjustment measures, it was necessary to determine whether they were indeed measuring different areas of functioning (academic, social relationships, help-seeking, and homesickness). A factor analysis of the adjustment variables yielded three factors that are listed in Table 5. These three factors each represent a general area of functioning - academics, help-seeking, and social relationships. Difficulty leaving home loaded on factor 2 with the help seeking variables. This analysis provides evidence that the different variables appear to be measuring distinct areas of adjustment, and justifies selecting a representative variable from each of these areas, instead of using all of them. The only variation in this factor analysis was that homesickness loaded with the help-seeking variables. Still, it had the lowest loading of all of the variables, and could provide information different from that of the variables that are clearly oriented toward help-seeking. Thus, it was included as a distinct adjustment variable, along with the seven point ratings of satisfaction from the areas of academics and social relationships, and the seven point rating of consideration of counseling.

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**Insert Table 5 about here**

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**Relationship Between Control, Hierarchy, and Adjustment Variables**

Before examining the relationship between the ten hierarchy measures and the adjustment measures, it was necessary to determine the relationship between relevant control variables and both the hierarchy and adjustment measures. The score on the social desirability test was included as a control variable because of its possible relationship to the students' self-report responses. Also included were gender, class, age, and number of siblings in the family because each reflects important characteristics of the students and their families.

The correlations between these control variables and the hierarchy and adjustment variables are shown in Table 6. They indicate that the social desirability score, number of
siblings in the family, and gender were related to several hierarchy measures. In addition, class was significantly related to consideration of counseling, and gender was related to homesickness. For these reasons, social desirability, class in school, and number of siblings were statistically controlled in subsequent analyses examining relationships among hierarchy measures and between hierarchy measures and adjustment measures.

Insert Table 6 about here

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**Relationship Among Hierarchy Measures**

The next step, then, was to examine the relationships among the hierarchy variables, while partialling out the effect of the three control variables, social desirability, class and number of siblings. The partial correlations for this analysis are presented in Table 7. These partial correlations provided information about the construct validity of the hierarchy variables. They indicate that the PPA variables correlate most highly with each other, as well as correlating in predicted ways with variables from other domains. As expected, dyad comparison-PPA correlates positively with the measures that reflect maintenance of hierarchy (forced choice-PPA-present and past, parental coalition, within-generation coalition, and parental authority), and negatively with variables reflecting breached generation boundaries (cross-generation coalition, child-directs-parent, and child-as-peer). These partial correlations also show that the present and past forced choice-PPA variables correlate most strongly with each other, as well as correlating positively, as expected, with a maintenance of hierarchy variable (parental coalition), and negatively with a non-maintenance variable (gang-up). The tendency for family members to gang up, especially across generational lines, is incompatible with the primacy of the parental dyad as it is measured by the forced choice-PPA variables.

For the coalition domain the findings are not as clearcut as for the alliance domain. All of the coalition variables intercorrelate significantly among themselves, and in expected directions, with the exception of parental coalition and cross-generation coalition, which did not correlate significantly with each other. Also, within-generation coalition correlated in unexpected ways with two other coalition variables. It showed a positive correlation with both gang-up and cross-generation coalition, both of which represent breached hierarchy, while within-generation coalition would be expected to represent maintenance of hierarchy. Additionally, within-generation coalition correlated significantly, although not as highly, with one other non-maintenance variable, child-directs-parents, and with one other maintenance variable, dyad comparison-PPA. Coalition variables demonstrated significant relationships with alliance and parent-child roles variables as well. For example, parental coalition’s highest
correlations were with all of the alliance variables, and with parental authority from the parent-child roles domain. Gang-up had correlations with the forced choice-PPA variables that were of comparable strength to those it had with other coalition domain variables, and also had another strong correlation with child-directs-parents from the parent-child roles domain. Finally, cross-generation coalition was strongly related to dyad comparison-PPA from the alliance domain, child-as-peer, and particularly child-directs-parents from the parent-child roles domain.

The parent-child roles variables, in addition to their high correlations with coalition variables, were all related to dyad comparison-PPA. Also, the intercorrelations within this domain were relatively weak and largely weaker than the correlations with variables from other domains. It should be noted that most of the inter-domain correlations demonstrated by parent-child roles variables and coalition variables were in theoretically expected directions, but the degree of overlap calls into some question the ability of the coalition and parent-child role variables to capture unique aspects of hierarchy.

To summarize, the alliance domain demonstrated the strongest construct validity, followed by the coalition domain and parent-child roles. Even though these domains differed in the degree to which they captured unique aspects of hierarchy, the maintenance of hierarchy variables largely correlated with one another in expected ways. Maintenance of hierarchy variables also tended to correlate negatively with those variables theoretically representing breached generation boundaries. These results, then, lend some support to the construct validity of the hierarchy variables constructed.

**Relationship Between Hierarchy and Adjustment Variables**

In order to determine the predictive validity of the hierarchy variables, their relationship to student adjustment was examined. Because the factor analysis of the adjustment measures indicated that the respective variables represented the general categories of help-seeking, academics, social relationships, and homesickness, four variables were selected as representative of these categories: the student's ratings of satisfaction with social relationships, consideration of counseling, satisfaction with academic performance, and difficulty being away from home.

Partial correlations were computed between these four adjustment measures and the ten hierarchy variables, with social desirability, class in school, and number of siblings in the family statistically controlled. The results, presented in Table 8, indicate that two of the primary parental alliance variables, two of the coalition variables, and two of the parent-child roles
variables showed significant relationships with adjustment. The forced choice-PPA-present variable was significantly correlated with both academic satisfaction and consideration of counseling. Nominating the parental dyad as primary was associated with greater satisfaction with academic performance, and with less consideration of counseling. Dyad comparison-PPA was significantly related to homesickness, with less indication of homesickness associated with higher ratings of the parental dyad. In addition, a greater prevalence of explicit two-against-one ganging up was associated with poorer academic satisfaction. Somewhat surprisingly, a stronger parental coalition was associated with greater homesickness. Increased ratings of child-as-peer were associated with greater homesickness, and unexpectedly, greater satisfaction with academic performance. Also, stronger parental authority was associated with greater homesickness.

Insert Table 8 about here

Some interesting variations in the overall pattern of the data appear for males and females. These data are presented in Table 9. With regard to alliance measures, the significant relationships between primary parental alliance (as measured by forced choice-PPA-present), academic satisfaction, and consideration of counseling show different patterns along gender lines. The significant relationship with consideration of counseling only holds for males, while the relationship with academic satisfaction is only true for females. Furthermore, for females the correlation between forced choice-PPA-present and consideration of counseling, while in the same direction, did not even approach significance, while for males the correlation of forced choice-PPA-present and academic satisfaction was also very weak. In addition, a significant relationship between forced choice-PPA-past and both social satisfaction and consideration of counseling holds for males, but not for females. For males, nomination of the parental dyad as primary in the past is associated with greater social satisfaction and less consideration of counseling. For females there was a very weak relationship between forced choice-PPA-past and both social satisfaction and consideration of counseling, lending support to the gender pattern difference.

The significant relationship between dyad comparison-PPA and homesickness held for both males and females, but males showed an additional, unexpected, result for dyad comparison-PPA in that higher ratings of the parental dyad were associated with less academic satisfaction. The contrast between males and females was again highlighted by the corresponding result for females, who demonstrated a very weak relationship between dyad comparison-PPA and academic satisfaction.
For the coalition variables, results for males and females indicated that the relationship in the total sample between gang-up and academic satisfaction was primarily due to females. Females alone significantly associated increased ganging up with less academic satisfaction. The corresponding correlation for males did not approach significance. For parental coalition, the significant result in the total sample in relation to homesickness also appears to be due to the responses of the females, who alone associated a stronger parental coalition with greater homesickness. Again, the corresponding correlation for males was quite weak. Two other findings were that a stronger parental coalition was associated with less consideration of counseling for males, and greater academic satisfaction for females. For females the corresponding relationship between parental coalition and consideration of counseling was similar but non-significant ($r = .11, p = .10$). For males the relationship between parental coalition and academic satisfaction was weak and in a different direction.

The pattern in the total sample between the parent-child role variables and adjustment is further explicated by analyzing the data separately for males and females. For example, the unexpected relationship between increased perceptions of child-as-peer and greater academic satisfaction is true for males only. This result is consistent with the previously reported finding that higher ratings of the parental dyad, on dyad comparison-PPA, were associated with less academic satisfaction. Males alone seem to be associating equality in relation to their parents with greater satisfaction academically. With regard to the relationship between child-as-peer and greater homesickness, it is only statistically significant for females. For males the correlation is in the same direction but weaker and non-significant ($r = .13, p = .12$). Finally, the relationship in the total sample between increased parental authority and greater homesickness also appears to hold primarily because of the females. The correlation for males was in the same direction but only approached significance ($r = .15, p = .09$). This result is consistent with the relationship, for females, of a stronger parental coalition and greater homesickness. Thus, females appear to have difficulty leaving home to the degree that there is synchrony between the parents in terms of parental decision making and general parental authority. The loss of parental structure appears to have a greater relationship to adjustment for females.

To summarize, these partial correlations indicate that all three of the alliance measures, two of the coalition measures (gang-up and parental coalition) and two of the parent-child role measures (child-as-peer and parental authority) showed relationships to adjustment. In some cases, the specific patterns displayed appeared to differ along gender lines.
Regression analyses were performed to examine further the relationship between the student adjustment variables and the sets of variables in the two general hierarchical categories of alliances/coalitions and parent-child roles, as well as all hierarchy variables together. The general strategy was to regress the control and hierarchy variables, as blocks, onto each adjustment measure. Specifically, in each analysis, the control variables of social desirability, class, and number of siblings were entered initially as a block, followed by either the seven alliance/coalition variables entered as a block, the three parent-child roles variables, or all hierarchy variables together. The hierarchy variables were split and entered in separate analyses in order to examine the respective predictive value of the triadic hierarchy variables (alliance/coalitions) and the dyadic hierarchy variables (parent-child roles), in contrast to the value of the entire set of hierarchy variables. Analyses were done for the total sample, males, and females. We were primarily interested in the respective amounts of variability in adjustment accounted for by the groups of hierarchy variables, above and beyond that accounted for by control variables. The amount of variability accounted for by all hierarchy variables together was of interest as a measure of the total influence of hierarchy on the different areas of adjustment.

The first set of regression analyses examined the predictive influence of the two hierarchy blocks, and all hierarchy variables together, on academic satisfaction. The results indicate that for all subjects and males the two hierarchy blocks and all hierarchy variables together did not account for a significant amount of variance in academic satisfaction. For females, after entering the control block, the addition of the alliance/coalition block led to a significant change in $R^2$. This block accounted for an additional 8% of variance in academic satisfaction. All of the hierarchy variables together also yielded a significant result for females, with the hierarchy variables accounting for an additional 13% of the variance in academic satisfaction. The only other analysis approaching significance was the addition of the parent-child roles block for all subjects, which led to a change in $R^2$ of .03 ($p=.07$).

The analyses using social satisfaction and consideration of counseling as respective criterion variables indicated that none of the hierarchy blocks accounted for a significant amount of variability. For consideration of counseling two analyses did approach significance. For males the addition of the alliance/coalition block accounted for 13% of the variance in consideration of counseling ($p=.08$). Also for males, all of the hierarchy variables together accounted for 17% of the variance in consideration of counseling ($p=.10$).

Turning to the homesickness variable, for all subjects, the addition of the alliance/coalition block accounted for a significant amount of variance in homesickness. The alliance/coalition block accounted for an additional 13% of the variance in homesickness, a change in $R^2$ that was significant. For males the alliance/coalition block did not account for
significant additional variance, but for females it accounted for 15% of the variance in homesickness, a significant amount. For the total sample, the parent-child roles block also demonstrated a significant relationship with homesickness, explaining 6% additional variance. This significant relationship held for females but not for males. Finally, all hierarchy variables together, for all subjects, accounted for a significant amount of variance in homesickness (16%). Again, significant variance was accounted for by all of the hierarchy variables for females (18%), but not for males. Results for academic satisfaction, social satisfaction, consideration of counseling, and homesickness are summarized in Table 10.

Thus, these regression analyses indicate that only with regard to homesickness do both general categories of hierarchy, alliances/coalitions and parent-child roles, as well as all hierarchy variables together, account for significant amounts of variability beyond the control block. This pattern held for females, but not for males when the regression analyses were performed separately by gender, and is consistent with the findings of the partial correlations in which homesickness was related to dyad comparison-PPA, parental coalition, child-as-peer, and parental authority. In all of the cases except dyad comparison-PPA, these significant partials held only for females. Additionally, in the regression analyses, the alliance/coalition block predicts a significant amount of academic satisfaction for females. This partly fits with the findings of the correlational analysis in that a relationship was found, for females alone, between academic satisfaction and both forced choice-PPA-present, and gang-up coalition. The significant relationships for males between dyad comparison-PPA, child-as-peer, and academic satisfaction were not substantiated by the multiple regression results though. Also, for males, the relationship demonstrated in the partial correlations between consideration of counseling and forced choice-PPA-present, forced choice-PPA-past, and parental coalition was not substantiated by the regression analysis, although significance was approached.
DISCUSSION

This study investigated the construct and predictive validity of self-report measures of family hierarchy. Two issues of construct validity were addressed. The first is whether items intended to represent different constructs organized themselves in theoretically meaningful ways within the different hierarchical domains of alliances, coalitions, and parent-child roles. The second issue was whether or not the factor analytically derived measures demonstrated theoretical consistency between domains. In other words, the question was whether the correlations of the different measures within the hierarchical domains were stronger than the correlations of measures between these domains. Finally, a second major question addressed by this study was the predictive validity of the hierarchy measures in relation to student adjustment.

Turning first to within domain construct validity, measures in some domains held together better than in others. On the forced choice-PPA measures subjects did seem to differentiate between past and present alliances, as expected. Within those two time frames, subjects to a great degree did not appear to differentiate on the basis of the more specific categories such as "strongest" or "closest" relationship. The theory of structural family relations (Minuchin, 1974) argues that present family structure should be particularly salient, so subjects' responses were consistent with such a formulation. The other PPA measure - dyad comparison - was an indicator of the primacy of the parental relationship, derived from general ratings of relationship, as well as from more specific items based loosely on Wood and Talmon's proximity territories (i.e., contact time, information, conversation, decision, personal, and emotional space). Subjects seemed to respond to these items primarily in terms of the relevant dyad (mother-father, mother-subject, father-subject) as opposed to any particular aspect of proximity. These results suggest that the notion of dyadic proximity has good construct validity because subjects are indicating that dyads "sharing territory" on a particular component of proximity are likely to do so on other components as well. Thus, the summary dyad comparison measure followed the path set by the respondents themselves by collapsing across items and comparing the dyads relative to one another.

For the coalition items, factor analysis also revealed theoretically meaningful factors. Two of these, the gang-up and cross-generational coalition measures, clearly represent tendencies to breach hierarchy. Gang-up coalition was composed of a cluster of items which were the most explicit in suggesting that family members were joining together against
(ganging up on) one another. It was interesting that this factor included items indicating that mother or father and the subject were ganging up on an excluded parent, as well as mother and father ganging up on the subject, or children ganging up on parents. Thus, these items seem to represent a general tendency in the family for coalitions to form, whether or not they in fact cross generation lines. The two items in the cross-generational coalition factor both represented the tendency for a parent and the subject to join together excluding the other parent. Additionally, because the items involve talking about the other parent, they suggest an inappropriate sharing of information that clearly breaches generational hierarchy.

Two of the coalition variables were composed of items developed to represent coalitions that maintain generational hierarchy. The within-generation measure is composed of items similar to those composing the cross-generational measure, except that they reflect parents talking together about children, or children talking about parents. Thus, the generational line is maintained. Similarly, the items representing the parental coalition measure relate to the ability of the parents to form an effective executive coalition in parenting the children. The coalition variables all correlated significantly with each other and in expected directions, with the exception of parental coalition and cross-generational coalition which did not correlate significantly. To summarize, the coalition items formed four variables representing theoretically meaningful and distinct aspects of coalition formation.

The items associated with collapse/reversal of parent-child roles showed an interesting and somewhat surprising pattern with regard to the relationship between proximity and hierarchy. In responding to these items, which were based on Wood and Talmon's general hierarchical categories of nurturance, hierarchical control, and peers, subjects seemed to abstract themes that did not always follow generational lines but rather appeared to be based primarily on interpersonal closeness or proximity. All but three of the items that reflected issues of proximity as opposed to hierarchy had to do with nurturance. Of the three non-nurturance items, two were peer related and one was a hierarchical control item. For example, nurturance items such as "Mother takes care of me" and "Father takes care of me" were associated with their corresponding reversal items (i.e. "I take care of mother; I take care of father"). It was expected that items such as these would be held distinct by subjects, but this general quality of interpersonal proximity seemed to take precedence over hierarchical issues. Two nurturance items did load on a factor that was hierarchically oriented (i.e., "I give mother advice"; "I give father advice", along with hierarchical control items, "I tell mother/father what to do"). The two peer related items that were associated in a proximity oriented way were "Father and I are like brothers" (which loaded with nurturance items such as "I tell father what's bothering me"; "Father tells me what's bothering him"), and "Mother and I are like sisters" (which went with items like, "I tell mother what's bothering me"; "Mother tells me what's
bothering her). Thus, these groups of items seemed to be indicating general closeness and sharing with father and mother respectively. All four peer items did go together, though, on another factor that did reflect hierarchy, albeit in terms of collapse/reversal (i.e., "Mother/father and I are like sisters/brothers"; "Mother/father and I treat each other as equals"; along with a hierarchical control item "Mother tells me what to do"). Hierarchical control-oriented items generally did go together in ways reflecting hierarchy, particularly on the parental authority factor (i.e., "Mother's authority is seldom questioned"; "Father's authority is seldom questioned"). The one hierarchical control item ("Father tells me what to do") that loaded on a proximity oriented factor also loaded at roughly the same strength on a hierarchically oriented factor. So, when Wood and Talmon's formulation of hierarchy in terms of nurturance, hierarchical control, and peer issues is operationalized in a self-report format, subjects respond to some of the items (mainly the nurturance ones) more from a perspective of interpersonal proximity as opposed to generational hierarchy. Such a result suggests that within a self-report format it may be difficult to develop a reliable (internally consistent) questionnaire measure of the collapse/reversal of nurturance hierarchy, perhaps because of the salience of a component of interpersonal closeness within nurturance. Also, the correlations between the parent-child roles variables that did reflect hierarchy (i.e., child-directs-parents, child-as-peer, and parental authority) were weaker than would be expected and the correlation between parental authority and child-as-peer only approached significance. These correlations suggested that these variables were relatively weak representatives of the parent-child roles hierarchical domain.

Having examined the construct validity within domains of the factor analytically derived measures, it is now important to discuss the consistency between the major domains of alliances, coalitions, and parent-child roles. First, with regard to alliances, the three representative measures, dyad comparison-PPA, forced choice-PPA-past, and forced choice-PPA-present, had stronger relationships with one another than with any of the measures from other domains, but without intercorrelating so highly as to suggest redundancy. Correlations with items from other domains were in predicted directions also. This provides additional support for the alliance variables as valid measures of a unique aspect of hierarchy.

The coalition and parent-child roles variables were somewhat less definitive in representing their respective domains. The within-generation coalition variable, for example, showed theoretical inconsistency in that it correlated with measures of both maintenance and non-maintenance of hierarchy. This variable also demonstrated the weakest alpha (.32). One explanation could be that this measure, composed of two items: "Mother and father talk about the children in private", and "My brother(s)/sister(s) and I talk about our parents in private", and...
captured maintenance of boundaries to the point of cut-off between generations. Thus, it would correlate with hierarchical maintenance measures because the coalitions it reflects follow generational lines, but would also correlate with non-maintenance measures because the hierarchy is organized more rigidly in terms of general coalition formation that cuts any two individuals off from a third.

Other correlations also provide weak evidence of the validity of the coalition variables as measures of a distinct hierarchical domain. For example, parental coalition’s strongest correlations were with variables from both the alliance and parent-child roles domains. Gang-up coalition and cross-generation coalition also demonstrated correlations with variables from other domains that were equal in strength to its intra-domain correlations. Finally, in the parent-child roles domain variables tended to correlate higher with variables from the other two domains. This finding, in concert with the relatively weak intra-domain correlations for parent-child roles variables, suggests that these measures were demonstrating rather poor construct validity in relation to representing parent-child roles as a unique hierarchical domain.

To summarize, the empirical relationships between the self-report hierarchical items indicated that it was possible to obtain measures of hierarchy reflecting varying degrees of construct validity within and between domains. Subjects did appear to organize their responses along generational lines in many instances, although items that include elements of nurturance in relationships were responded to more in terms of interpersonal proximity, regardless of generational issues. In general, the domains showed a descending degree of clarity from alliance patterns, to coalition patterns, to differentiation of parent-child roles. Even though the hierarchy variables only did a fair job of representing the hierarchical domains, they did relate to each other in theoretically predictable ways, based on the larger theme of whether they represented maintenance or non-maintenance of hierarchy. The only exception was the within-generation coalition variable, which related to both maintenance and non-maintenance variables.

Before turning to the predictive validity of the hierarchy measures, it is interesting to note some of the normative components of the data and their contrast to previous work. Research by Teyber, using questions phrased in terms of a past emotional closeness dimension, found that males most frequently indicate that the mother-father dyad is primary, followed by a parent-child dyad. The reverse was found for females. The findings here were more in line with the expectations of structural family theory in that males and females most frequently nominated the mother-father dyad as primary, when questions were framed in terms of the present. The most frequently chosen dyad for the past timeframe was also mother-father. In addition, subjects made these selections across several dimensions. These data contradict aspects of Teyber’s normative findings and provide more
comprehensive support for structural family theory, which maintains that under normal conditions the parental dyad will be primary.

Moving to predictive validity, in general, aspects of hierarchy, particularly in terms of maintenance or non-maintenance, predicted adjustment in expected ways. Still, the relationship between hierarchy and adjustment appears to be different for males and females. For males, some aspect of hierarchy was related to each of the adjustment variables. For females, academic satisfaction and homesickness showed some relationship to aspects of hierarchy.

Much of the theorizing in structural family theory grows out of clinical applications. Thus, the consideration of counseling by an individual could be viewed as particularly important in the study of family hierarchy. As stated, the present data indicate that consideration of counseling was only related to hierarchy for males. For males, less consideration of counseling was related to a stronger parental alliance in both the present and the past, and to a stronger parental coalition. The feeling that one is having difficulties that might require counseling seems to decrease along with perceptions that the parental dyad has maintained primacy over time. The parental coalition variable captures aspects of the parents’ ability to be together in executive functioning - especially with regard to setting and enforcing rules. Thus, better executive functioning by the parents is associated with male children at least feeling that they are having fewer problems requiring counseling. A related result is that males who indicated that the parental dyad was more primary in the past are more satisfied with the social relationships they have formed at college. The correlation with present primacy of the parental dyad only approached significance. This result is somewhat more difficult to interpret in that structural theory emphasizes the importance of present over past, and one would at least expect that the present alliance structure would also be important. Still, the results indicate that a general aspect of hierarchical maintenance relates to the ability to develop interpersonal relationships separate from the family.

So, for males the hierarchical domains of alliances and coalitions, but not parent-child roles, show a relationship to consideration of counseling and social satisfaction. Specifically, the primacy of the parental alliance and better executive functioning in terms of agreement on general parenting, rule setting, and rule enforcement, appear to be of most importance. If males are socialized to think in more instrumental as opposed to emotional terms, then it might be expected that they would particularly respond in their own families to aspects of control and direction that are clear, as would be the case when generational hierarchy is maintained. For females, on the other hand, neither satisfaction with social relationships nor consideration of counseling showed significant relationships with hierarchy.
The finding that parent-child role variables were not significant predictors of social satisfaction or consideration of counseling should be considered in light of the fact that aspects of differentiation of roles might perforce be reflected in the alliance and coalition domains. It could be argued that the parental coalition variable, for example, can be viewed as encompassing the ability of the parents to differentiate their appropriate parenting role from aspects of behavior appropriate for children. An interpretation such as this is consistent with the degree of overlap actually found in this study between the parent-child roles domain and the other hierarchy domains. Thus, variables intended to represent aspects of parent-child roles may need to be particularly sensitive in order to capture aspects of parent-child roles unique to that hierarchical domain.

The results for the relationship between academic satisfaction and hierarchy showed another interesting divergence along sex lines. It was puzzling that males reported more academic satisfaction when the parental alliance was less primary (as determined by the dyad comparison-PPA measure), and when they had more peer-like relationships with their parents. This is of course counter to the expected results and seems to argue that males' academic satisfaction will tend to improve to the degree that they see themselves more on the same hierarchical level with their parents. This raises a question as to whether the age group in this study, in perhaps viewing themselves in a more adult fashion, begin to view themselves as increasingly equal to their parents (in the sense of adult-adult). Thus, at least in a self-report framework, emancipation from home and increased status as a young male adult may be reflected in a view of oneself as less of a child and more of a peer-like adult in relation to ones parents. For this age group, satisfaction with academic performance can be taken as synonymous with satisfaction with work or task oriented goal attainment. Perhaps for the males in this sample, the perception of a more adult-like position in relation to parents coincides with greater satisfaction in this work or task oriented arena.

For females on the other hand, a totally different picture is presented. Females show more satisfaction in academics when they view the present parental alliance as more primary, when parents are able to present a stronger parental coalition, and when there is less of a tendency for ganging-up in a two against one fashion to occur. Thus, females seem to have focused not at all on generational equality but, quite the contrary, on a generally greater tendency for parents to be in executive control and for generational lines to be maintained, in terms of alliances and coalitions. This is quite a different result from that presented by the males who indicated that they feel they perform better academically when part of a more peer-like relationship with their parents.

In terms of hierarchy, the homesickness variable also appears to be particularly important to females. They indicated, along with males, that a stronger parental dyad, compared to
other dyads, is predictive of less homesickness. Females alone indicated that less of a peer-like relationship with parents also relates to less homesickness. Thus, ease of transition to college is facilitated by maintenance of hierarchy in terms of primacy of parental alliance and appropriate parent-child roles. Nevertheless, females also show an unexpected result in relation to homesickness. Decreased strength in the parental coalition and in parental authority both related to less homesickness. The expected result would be that greater executive functioning in these areas, largely represented by parents who are more together in setting and enforcing rules and whose authority is questioned less, would ease the transition to college. Paradoxically, the results obtained could be because females, when they make the transition to college, miss the structure provided by a more effective executive subsystem.

In general, the data for both males and females indicate that measures of family hierarchy under the domains of alliances and coalitions comprised the best predictors of adjustment. In the partial correlations forced choice-PPA-past, and present, and dyad comparison-PPA were each related to two adjustment measures respectively, while parental coalition was related to three of the four adjustment measures and gang-up was related to one of the four. The multiple regression analyses also showed that the alliance/coalition block was key in relation to homesickness for all subjects (13% variance accounted for), and females (15% accounted for). This can be stated because the separate analysis using all of the hierarchy variables together only accounted for 3% more variance, for the total sample and females respectively, than the alliance/coalition block accounted for alone. For academic satisfaction for females, all of the hierarchy variables together accounted for 13% variance compared to 8% accounted for by the alliance/coalition block alone, so again the alliance/coalition block comprised the key predictors. For males, the relationships displayed in the partial correlations between consideration of counseling, academic satisfaction, and different alliance/coalition variables, were not substantiated by the multiple regression analyses. For consideration of counseling though, the alliance/coalition block at least accounted for an amount of variance (13%) approaching significance. The parent-child roles domain was primarily important in relation to academic satisfaction for males and homesickness for females. In multiple regression analyses the block of parent-child roles variables were significant predictors only in relation to homesickness for the total sample and for females. Even here though, the parent-child roles block accounted for less of the variability in homesickness than the alliance/coalition block did.

Overall, these results provide some support for the hypothesized relationship between family hierarchy and student adjustment. Several limitations of this study should be addressed. The most obvious is that the correlations obtained were not particularly strong
and the variance accounted for was generally modest. Thus, any conclusions drawn from the
data should be made with caution. It should be noted though, that other studies of hierarchy,
using a wide range of measures, have also tended to obtain relatively modest effect sizes. A
question is therefore raised as to whether the results of this study conform to a general
pattern in which the effect of hierarchy, when assessed in a research framework, is not as
pronounced as might be expected based on theoretical and clinical formulations. Future
studies should also attempt to refine the measures representing hierarchical domains. In the
present study, the parent-child roles measures overlapped considerably with measures from
the other domains, and did not demonstrate particularly strong intra-domain relationships
either. In addition, a specific question relates to the homesickness variable and whether it is
really an uncontaminated measure of adjustment. That is, unlike the other dependent
variables that measured some obvious aspect of adjustment at school, it could be argued that
homesickness is contaminated by components of the family environment itself, such as
overall closeness or involvement. Responses gauging the degree of difficulty leaving home
could therefore include aspects of both adjustment to the school environment, and aspects
of the family environment and degree of involvement between family members.

The external validity of the results is limited by the homogeneous sample of college
students used. Generalizing from this sample to other populations is therefore difficult to
justify. The homogeneous sample may actually have worked against finding predictive validity
because of the restricted range of adjustment demonstrated by such a sample. All of these
students had been admitted to a competitive college and were from intact families. Also, the
perspective of only one family member was obtained in this study, although there is some
evidence suggesting that, on similar measures, agreement between family members is good
(Eldridge and Rohrbaugh, 1986). There are theoretical considerations relevant to the
perspective obtained in this study as well. The theory of structural family relations, and its
conceptualization of hierarchy, has largely developed from the work of clinicians. Thus, it is
based on the perspectives of clinicians who are describing their observations of families,
primarily in clinical settings. The present study, on the other hand, examined hierarchy from
the perspective of a family member, not from the perspective of an outside observer (such as
a clinician). Strictly speaking then, a study such as this one is not a direct test of the theory,
but can only provide information about the correspondence of the theory with the
perspective of an "insider" (i.e. a family member).

The fact that some measures of family hierarchy did appear to demonstrate predictive
validity also raises the question of the generality of the relationship between breached
hierarchy and adjustment. The results of this study suggest that the predictive validity of
some hierarchy measures could change through the family life cycle. Thus, it could be
important to consider the developmental stage of the subjects in a study. Most of the students in this study were at the point of leaving home for the first time, and while this study included a measure of the difficulty of transition to college, more attention must be paid to how the family hierarchy changes, from the point just before leaving home, to after separation occurs. Some of the unexpected results indicate that perhaps, for young males, it is important that a more peer-like relationship with parents develop (at least in terms of the child's perceptions), which could be more consistent with the child's developmental progress in leaving home. Also, the kind or degree of executive functioning on the part of parents probably needs to change at this point, in order that the child begin to develop his/her own controls while living independently. Young females, for instance, may need more assistance from parents in making the transition from conditions of high parental influence and authority, to conditions of less parental influence. Generality of the relationship between hierarchy and adjustment must also be considered in terms of the composition of the family (e.g., intact or divorced families), and differing cultural contexts. In families in which there has been a divorce for example, there may be pragmatic reasons, in terms of functions that must be performed, for the family hierarchy to be "flatter". In such a case a child could operate on the same or nearly the same hierarchical level, at least for certain functions.

Finally, this study leaves open the question of how self-report and behavioral measures of hierarchical constructs would relate to one another, if at all. Inclusion of both kinds of measures in the same study would provide a basis for the establishment of convergent construct validity. Research conducted by Oliveri and Reiss (1984) gives some indication that self-report and observational methods of family assessment show little correspondence. Oliveri and Reiss argue that distinctive features of the methods themselves contribute to the poor correspondence. Specifically, self-report methodologies must consider the nature of the relationship between subject and experimenter and how that interacts with the subject's images of the family, as well as extrinsic factors (e.g. socioeconomic status) and individual factors. Observational methods must consider qualities intrinsic to families as groups, qualities that do not tend to be connected to extrinsic or individual factors. Nevertheless, studies have shown that self-report is still useful in capturing intrinsic qualities of families when other factors related to the methodology itself (i.e. extrinsic and individual member characteristics) are controlled (Bromet and Moos, 1977; Oliveri and Reiss, 1984). Perhaps more importantly though, areas of divergence could be ascertained and assessed if both kinds of methodologies were used in the same study. For example, based on the results of this study, it would be interesting to examine whether the relationship, for males, between
academic satisfaction and perceptions of a more peer-like relationship with parents, would be substantiated by objective measures. The power of a study such as the present one could be greatly enhanced by combining elements of a self-report methodology with elements of an observational methodology, and thus increasing the usefulness of both approaches to the study of family hierarchy.
REFERENCES


Table 1  
Factor Analysis of Forced-Choice Primary Parental Alliances (PPA) Dimensions;  
Factor Loadings Greater than .40

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PAST primary parental alliance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongest relationship overall</td>
<td>.58</td>
<td>.43</td>
<td></td>
</tr>
<tr>
<td>Closest emotionally</td>
<td>.51</td>
<td>.51</td>
<td></td>
</tr>
<tr>
<td>Most in charge</td>
<td></td>
<td></td>
<td>.78</td>
</tr>
<tr>
<td>Most similar attitudes and interests</td>
<td></td>
<td></td>
<td>.73</td>
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<tr>
<td>Best know each others' thoughts</td>
<td></td>
<td></td>
<td>.78</td>
</tr>
<tr>
<td>Spend most time together</td>
<td></td>
<td></td>
<td>.74</td>
</tr>
<tr>
<td><strong>PRESENT primary parental alliance</strong></td>
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<tr>
<td>Strongest relationship overall</td>
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<tr>
<td>Closest emotionally</td>
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<td></td>
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<tr>
<td>Most in charge</td>
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<td>.79</td>
</tr>
<tr>
<td>Most similar attitudes and interests</td>
<td>.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Best know each others' thoughts</td>
<td>.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spend most time together</td>
<td>.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of total variance</td>
<td>39%</td>
<td>9.6%</td>
<td>9.4%</td>
</tr>
</tbody>
</table>

Note. Table entries are varimax-rotated loading from SPSS-X principle components analysis.
### Table 2

**Factor Analysis of Dyad-Comparison Primary Alliance Items: Factor Loadings Greater than .40**

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relationship with mother</strong></td>
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</tr>
<tr>
<td>Overall rating</td>
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<td></td>
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<tr>
<td>Distant-close</td>
<td>.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weak-strong</td>
<td>.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflictual-harmonious</td>
<td>.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Relationship with father</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall rating</td>
<td>.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distant-close</td>
<td>.80</td>
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</tr>
<tr>
<td>Weak-strong</td>
<td>.79</td>
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<td></td>
</tr>
<tr>
<td>Conflictual-harmonious</td>
<td>.70</td>
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<td></td>
</tr>
<tr>
<td><strong>Parents' relationship with each other</strong></td>
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<td></td>
</tr>
<tr>
<td>Overall rating</td>
<td>.86</td>
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<td></td>
</tr>
<tr>
<td>Distant-close</td>
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<td></td>
</tr>
<tr>
<td>Weak-strong</td>
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<td></td>
</tr>
<tr>
<td>Conflictual-harmonious</td>
<td>.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Proximity (interpersonal involvement) Items</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. When I am at home, my mother and father spend free time together.</td>
<td>.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. When I am at home, mother and I spend free time together.</td>
<td>.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. When I am at home, father and I spend free time together.</td>
<td>.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Mother and father can usually sense each other’s feelings.</td>
<td>.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Mother and I can usually sense each other’s feelings.</td>
<td>.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Father and I can usually sense each other’s feelings.</td>
<td>.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Mother and father know what there is to know about each other.</td>
<td>.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Mother and I know what there is to know about each other.</td>
<td>.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Father and I know what there is to know about each other.</td>
<td>.60</td>
<td></td>
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<tr>
<td>10</td>
<td>Mother and father have private conversations.</td>
<td>.57</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Mother and I have private conversations.</td>
<td>.55</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Father and I have private conversations.</td>
<td>.60</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Mother and father make decisions effectively.</td>
<td>.52</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Mother and I make decisions effectively.</td>
<td>.56</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Father and I make decisions effectively.</td>
<td>.51</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Mother and father are physically affectionate with each other.</td>
<td>.65</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Mother and I are physically affectionate with each other.</td>
<td>.54</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Father and I are physically affectionate with each other.</td>
<td>.53</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Sometimes it seems as if father and mother can almost read each other's minds.</td>
<td>.64</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Sometimes it seems as if mother and I can almost read each other's minds.</td>
<td>.59</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Sometimes it seems as if father and I can almost read each other's minds.</td>
<td>.55</td>
<td></td>
</tr>
</tbody>
</table>

Percent of total variance

|   | 37.0% | 14.2% | 7.6% |

Note. Table entries are varimax-rotated loadings from an SPSS-X principle components analysis.
### Table 3

**Factor Analysis of Coalition Items: Factor Loadings Greater than .40**

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>44. Mother and father are usually in agreement where the children are concerned.</td>
<td></td>
<td></td>
<td>.76</td>
<td></td>
</tr>
<tr>
<td>45. Sometimes it is possible for the children to play mother and father against one another to get what we want.</td>
<td></td>
<td></td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>46. Rules for children are determined by mother and father together.</td>
<td></td>
<td></td>
<td>.88</td>
<td></td>
</tr>
<tr>
<td>47. Mother and father are together in enforcing rules.</td>
<td></td>
<td></td>
<td>.91</td>
<td></td>
</tr>
<tr>
<td>48. Mother and father talk about the children in private.</td>
<td>.43</td>
<td></td>
<td>.62</td>
<td></td>
</tr>
<tr>
<td>49. Mother and I talk about father in private.</td>
<td></td>
<td></td>
<td>.87</td>
<td></td>
</tr>
<tr>
<td>50. Father and I talk about mother in private.</td>
<td></td>
<td></td>
<td>.78</td>
<td></td>
</tr>
<tr>
<td>51. My brother(s) and sister(s) and I talk about our parents in private.</td>
<td></td>
<td></td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>52. Mother and father &quot;gang up&quot; on me.</td>
<td></td>
<td></td>
<td>.71</td>
<td></td>
</tr>
<tr>
<td>53. Mother and I &quot;gang up&quot; on father.</td>
<td></td>
<td></td>
<td>.66</td>
<td></td>
</tr>
<tr>
<td>54. Father and I &quot;gang up&quot; on mother.</td>
<td></td>
<td></td>
<td>.79</td>
<td></td>
</tr>
<tr>
<td>55. My siblings and I &quot;gang up&quot; on our parents.</td>
<td></td>
<td></td>
<td>.81</td>
<td></td>
</tr>
</tbody>
</table>

Percent of total variance

|           | 26.7% | 20.4% | 11.0% | 8.5% |

**Note.** Table entries are varimax-rotated loadings from an SPSS-X principle components analysis.
<table>
<thead>
<tr>
<th>Factor Analysis of Parent-Child-Role Items: Factor Loadings Greater than .40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>22. Mother's authority is seldom questioned.</td>
</tr>
<tr>
<td>23. Father's authority is seldom questioned.</td>
</tr>
<tr>
<td>24. I tell mother what's bothering me.</td>
</tr>
<tr>
<td>25. Mother tells me what's bothering her.</td>
</tr>
<tr>
<td>26. I tell Father what's bothering me.</td>
</tr>
<tr>
<td>27. Father tells me what's bothering him.</td>
</tr>
<tr>
<td>28. I take care of my mother.</td>
</tr>
<tr>
<td>29. Mother takes care of me.</td>
</tr>
<tr>
<td>30. I take care of my father.</td>
</tr>
<tr>
<td>31. Father takes care of me.</td>
</tr>
<tr>
<td>32. I give mother advice.</td>
</tr>
<tr>
<td>33. Mother gives me advice.</td>
</tr>
<tr>
<td>34. I give father advice.</td>
</tr>
<tr>
<td>35. Father gives me advice.</td>
</tr>
<tr>
<td>36. I tell mother what to do.</td>
</tr>
<tr>
<td>37. Mother tells me what to do.</td>
</tr>
<tr>
<td>38. I tell father what to do.</td>
</tr>
<tr>
<td>39. Father tells me what to do.</td>
</tr>
<tr>
<td>40. Mother and I are like sisters.</td>
</tr>
<tr>
<td>41. Father and I are like brothers.</td>
</tr>
<tr>
<td>42. Mother and I treat each other as equals.</td>
</tr>
<tr>
<td>43. Father and I treat each other as equals.</td>
</tr>
</tbody>
</table>

Percent of variance

| 28.9% | 11.0% | 9.7% | 8.2% | 5.5% | 5.4% |
Table 5
Factor Analysis of Student Adjustment Measures: Factor Loadings Greater than .40

<table>
<thead>
<tr>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade-point average (GPA)</td>
<td>.88</td>
<td></td>
</tr>
<tr>
<td>Academic achievement (relative to expectations)</td>
<td>.84</td>
<td></td>
</tr>
<tr>
<td>Satisfaction with academic performance</td>
<td>.91</td>
<td></td>
</tr>
<tr>
<td>Satisfaction with social relationships</td>
<td></td>
<td>.79</td>
</tr>
<tr>
<td>Intimate peer relationship scale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Received psychological counseling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived need for counseling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulty leaving home (homesickness)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of total variance</td>
<td>29.8%</td>
<td>21.5%</td>
</tr>
</tbody>
</table>

Note. Table entries are varimax-rotated loadings from SPSS-X principle components analysis.
Table 6
Correlations of Hierarchy and Adjustment Variables with Control Variables

<table>
<thead>
<tr>
<th>Control Variables</th>
<th>Social Desirability</th>
<th>Gender</th>
<th>Class</th>
<th>Age</th>
<th>No. of Sibs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hierarchy: Alliances and coalitions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary parental alliance (PPA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dyad comparison - present</td>
<td>-.16**</td>
<td>-.18**</td>
<td>.07</td>
<td>.08</td>
<td>.06</td>
</tr>
<tr>
<td>Forced choice - present</td>
<td>-.07</td>
<td>-.04</td>
<td>.12</td>
<td>.05</td>
<td>-.06</td>
</tr>
<tr>
<td>Forced choice - past</td>
<td>-.07</td>
<td>-.01</td>
<td>.06</td>
<td>.04</td>
<td>-.01</td>
</tr>
<tr>
<td>Coalitions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental coalition</td>
<td>.09</td>
<td>.09</td>
<td>-.04</td>
<td>-.09</td>
<td>-.10</td>
</tr>
<tr>
<td>Gangup coalition</td>
<td>-.21***</td>
<td>.03</td>
<td>-.04</td>
<td>-.01</td>
<td>-.09</td>
</tr>
<tr>
<td>Cross-generation coalition</td>
<td>-.12*</td>
<td>.08</td>
<td>-.05</td>
<td>-.07</td>
<td>-.08</td>
</tr>
<tr>
<td>Within-generation coalition</td>
<td>-.16**</td>
<td>.05</td>
<td>-.06</td>
<td>-.03</td>
<td>.04</td>
</tr>
<tr>
<td>Hierarchy: Parent-child roles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child directs parent</td>
<td>.01</td>
<td>.05</td>
<td>-.02</td>
<td>.02</td>
<td>-.11</td>
</tr>
<tr>
<td>Child as peer</td>
<td>.19**</td>
<td>.14*</td>
<td>-.03</td>
<td>-.09</td>
<td>-.24***</td>
</tr>
<tr>
<td>Parental authority</td>
<td>.03</td>
<td>.09</td>
<td>-.02</td>
<td>-.10</td>
<td>-.11</td>
</tr>
<tr>
<td>College adjustment variables</td>
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<td></td>
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<tr>
<td>Academic satisfaction</td>
<td>-.04</td>
<td>-.01</td>
<td>.09</td>
<td>.10</td>
<td>-.01</td>
</tr>
<tr>
<td>Considered counseling</td>
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<td>.03</td>
<td>.16**</td>
<td>.10</td>
<td>.07</td>
</tr>
<tr>
<td>Satisfaction with relationships</td>
<td>.02</td>
<td>.09</td>
<td>.02</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>Homesickness</td>
<td>.03</td>
<td>.17**</td>
<td>-.04</td>
<td>-.03</td>
<td>.02</td>
</tr>
</tbody>
</table>

Notes. Two-tailed significance tests. N=266.
*p<.05, **p<.01, ***p<.001
Table 7
Partial Correlations Among Hierarchy Variables, Controlling For Social Desirability, Class, and Siblings

<table>
<thead>
<tr>
<th>Hierarchy Variables</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9)</th>
<th>(10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Parental Alliances</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Dyad comparison</td>
<td>.45</td>
<td>.35</td>
<td>.28</td>
<td>-.11</td>
<td>-.30</td>
<td>.15</td>
<td>-.29</td>
<td>-.20</td>
<td>.14</td>
</tr>
<tr>
<td>2. Forced choice-present</td>
<td>.60</td>
<td>.27</td>
<td>-.19</td>
<td>-.09</td>
<td>.03</td>
<td>-.09</td>
<td>.01</td>
<td>.09</td>
<td></td>
</tr>
<tr>
<td>3. Forced choice-past</td>
<td>.21</td>
<td>-.16</td>
<td>-.10</td>
<td>.08</td>
<td>-.11</td>
<td>-.02</td>
<td>.05</td>
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<td></td>
</tr>
<tr>
<td>Coalitions</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>4. Parental coalition</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Gang-up coalition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Cross-generation coalition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Within-generation coalition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Parent-child Roles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Child directs parent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Child as peer</td>
<td>.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.12</td>
</tr>
<tr>
<td>10. Parental authority</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes,
N=261. Underlined correlation coefficients significant at p<.05, two-tailed test.
<table>
<thead>
<tr>
<th></th>
<th>Academic Satisfaction</th>
<th>Considered Counseling</th>
<th>Social Satisfaction</th>
<th>Homesickness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Parental Alliance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dyad comparison - present</td>
<td>-.09</td>
<td>.01</td>
<td>.01</td>
<td>-.23***</td>
</tr>
<tr>
<td>Forced choice - present</td>
<td>.11*</td>
<td>-.14*</td>
<td>.04</td>
<td>-.06</td>
</tr>
<tr>
<td>Forced choice - past</td>
<td>.01</td>
<td>-.07</td>
<td>.09</td>
<td>-.06</td>
</tr>
<tr>
<td><strong>Coalitions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental coalition</td>
<td>.08</td>
<td>-.01</td>
<td>-.01</td>
<td>.17***</td>
</tr>
<tr>
<td>Gang-up coalition</td>
<td>-.12*</td>
<td>.03</td>
<td>-.04</td>
<td>.04</td>
</tr>
<tr>
<td>Cross-generation coalition</td>
<td>.03</td>
<td>-.08</td>
<td>-.01</td>
<td>.04</td>
</tr>
<tr>
<td>Within-generation coalition</td>
<td>-.05</td>
<td>-.05</td>
<td>-.04</td>
<td>.02</td>
</tr>
<tr>
<td><strong>Parent-Child Roles</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child directs parent</td>
<td>-.01</td>
<td>-.01</td>
<td>.02</td>
<td>.07</td>
</tr>
<tr>
<td>Child as peer</td>
<td>.15**</td>
<td>-.10</td>
<td>.01</td>
<td>.18**</td>
</tr>
<tr>
<td>Parental authority</td>
<td>-.08</td>
<td>-.03</td>
<td>-.02</td>
<td>.22***</td>
</tr>
</tbody>
</table>

**Notes.** N=233. Correlation significant at: *p<.05, **p<.01, ***p<.001
Table 9
Partial Correlations Between Hierarchy and Adjustment Variables for Males and Females, Controlling for Social Desirability, Number of Siblings, and Class

<table>
<thead>
<tr>
<th></th>
<th>Academic Satisfaction</th>
<th>Considered Counseling</th>
<th>Social Satisfaction</th>
<th>Home-sickness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td><strong>Primary Parental Alliance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dyad comparison - present</td>
<td>-.19</td>
<td>-.03</td>
<td>-.06</td>
<td>.06</td>
</tr>
<tr>
<td>Forced choice - present</td>
<td>.05</td>
<td>.15</td>
<td>-.24</td>
<td>.08</td>
</tr>
<tr>
<td>Forced choice - past</td>
<td>.04</td>
<td>.01</td>
<td>-.28</td>
<td>.02</td>
</tr>
<tr>
<td><strong>Coalitions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental coalition</td>
<td>-.07</td>
<td>.19</td>
<td>-.19</td>
<td>.11</td>
</tr>
<tr>
<td>Gang-up coalition</td>
<td>-.07</td>
<td>.16</td>
<td>.06</td>
<td>.02</td>
</tr>
<tr>
<td>Cross-generation coalition</td>
<td>-.06</td>
<td>.08</td>
<td>.02</td>
<td>.11</td>
</tr>
<tr>
<td>Within-generation coalition</td>
<td>-.06</td>
<td>.05</td>
<td>-.13</td>
<td>.02</td>
</tr>
<tr>
<td><strong>Parent-Child Roles</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child directs parent</td>
<td>.08</td>
<td>.07</td>
<td>-.05</td>
<td>.01</td>
</tr>
<tr>
<td>Child as peer</td>
<td>.20</td>
<td>.12</td>
<td>-.09</td>
<td>.11</td>
</tr>
<tr>
<td>Parental authority</td>
<td>-.12</td>
<td>.06</td>
<td>-.09</td>
<td>.01</td>
</tr>
</tbody>
</table>

**Notes.**  N=143 for females, 85 for males. Underlined correlation coefficients significant at p<.05, one-tailed test.
Table 10.
Stepwise Multiple Regression Results: Hierarchy Variables as Combined Predictors of Student Adjustment

<table>
<thead>
<tr>
<th>Predictor block</th>
<th>All</th>
<th>M</th>
<th>F</th>
<th>All</th>
<th>M</th>
<th>F</th>
<th>All</th>
<th>M</th>
<th>F</th>
<th>R² Change</th>
<th>Change R²</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
<td>M</td>
<td>F</td>
<td>All</td>
<td>M</td>
<td>F</td>
<td>All</td>
<td>M</td>
<td>F</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Academic Satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Control block</td>
<td>.02</td>
<td>.03</td>
<td>.02</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.58</td>
<td>0.85</td>
<td>0.84</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Alliance-coalition block</td>
<td>.05</td>
<td>.08</td>
<td>.10</td>
<td>.03</td>
<td>.05</td>
<td>.08</td>
<td>1.27</td>
<td>0.64</td>
<td>2.05</td>
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</tr>
<tr>
<td>Parent-child role block</td>
<td>.05</td>
<td>.07</td>
<td>.05</td>
<td>.03</td>
<td>.04</td>
<td>.03</td>
<td>(2.34)</td>
<td>1.42</td>
<td>1.54</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>All hierarchy variables</td>
<td>.08</td>
<td>.11</td>
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**Notes.** The control, alliance-coalition, and parent-child-role blocks included three, seven, and three variables, respectively. The control block was entered first in all analyses, followed by one of the three hierarchy blocks, for a total of three separate analyses per criterion. Results for the social satisfaction criterion were all non-significant and are omitted. F-ratios for the hierarchy blocks test changes in R² over and above variation accounted for by the control block. Underlined F-ratios are significant at p<.05; those in parentheses are significant at p<.10.
Appendix A
Family Background Questionnaire II

Age ___
Sex  1.____ male  2.____ female
Class  F  S  J  Sr
Number of siblings (not including yourself) ___
Your birth order among natural siblings:
   1.____oldest   2.____youngest
   3.____middle   3.____only child
If not oldest are you the oldest of your sex?
   1.____no   2.____yes
Is at least one sibling of your sex?
   1.____no   2.____yes
Is at least one of the opposite sex?
   1.____no   2.____yes

WITH WHAT ETHNIC BACKGROUND, IF ANY DO YOU IDENTIFY?
   1.____Black
   2.____Oriental
   3.____Irish
   4.____Italian
   5.____German
   6.____Hispanic
   7.____English
   8.____White American
   9.____Other (_____________)
How strongly do you identify with this ethnic group?
Not at all  1  2  3  4  5  6  7  Very Strongly
Did you or either of your parents migrate to this country?
   1.____no   2.____yes
What is your religious background?
1. Catholic  2. Jewish  
3. Protestant  4. Other
Do you attend religious services at least monthly?
1. no  2. yes
How many grandparents are still living? ___
With which grandparents did you have most contact when you were growing up?
1. mother's side  2. father's side  
3. about the same  4. not applicable
Were you born within a year of the death of any of your
1. no  2. yes
Were any of your siblings born within a year of your grandparent's
1. no  2. yes
Did either of your mother's parents die before she was 18?
1. no  2. yes
Did either of your father's parents die before he was 18?
1. no  2. yes
Did any grandparents or other relatives live with your family when were growing up?
1. no  2. yes
Does a grandparent or other relative live with you or your parents
1. no  2. yes
Is either of your parents deceased?
1. no  2. yes
If yes, how old were you at first parent's death? ___
Are any siblings deceased?
1. no  2. yes
Did your parents ever separate or divorce?
1. no  2. yes
If yes, how old were you then? ___
Has either parent remarried?
1. no  2. yes
If yes, who?
1. mother  2. father  3. both
Are your biological parents living with each other now?
1._no  2._yes
Where are you living now?
1._at home with parents
2._on campus
3._off campus, alone
4._off campus, with friends
5._off campus, with relatives
Does at least one parent live (check all that apply):
1._within 0-30 miles of campus
2._within 31-75 miles
3._within 76-200 miles
4._greater than 200 miles
How often do you see or speak with your mother?
1._daily
2._several times weekly
3._weekly
4._every week or two
5._monthly
6._several times a year
7._yearly
8._not at all
How often do you see or speak with your father?
1._daily
2._several times weekly
3._weekly
4._every week or two
5._monthly
6._several times a year
7._yearly
8._not at all
Do you have a sibling(s) living at home now?
1.__no  2.__yes

Is there a sibling not at home who has more contact with your parents than you do?
1.__no  2.__yes

Father's education?
1.__less than high school
2.__high school
3.__some college or technical training
4.__college graduate
5.__graduate degree

His occupation? _________________

Mother's education?
1.__less than high school
2.__high school
3.__some college or technical training
4.__college graduate
5.__graduate degree

Her occupation? _________________

Total family income (approximate):
1.__below 15000
2.__15000-30000
3.__30000-50000
4.__50000-100000
5.__over 100000

Who was your main parent-figure when you were growing up?
1.__mother
2.__father
3.__mother and father equally
4.__grandparents
5.__other relative
6.__non-relative

How would you rate your achievement in college so far?
1.__worse than I expected
2.__about what I expected
3. __better than I expected

How satisfied are you with your academic performance to this point?
NOT SLIGHTLY QUITE EXTREMELY
AT ALL Satisfied

1  2  3  4  5  6  7

What is your GPA? ____

Have you failed a course in college so far?
1.__no  2.__yes

Has your mother ever had a serious emotional or behavioral problem?
1.__no  2.__yes

Has your father ever had a serious emotional or behavioral problem?
1.__no  2.__yes

Have any of your siblings ever had a serious emotional or behavioral problem?
1.__no  2.__yes

Did you receive psychological counseling of any kind before coming to college?
1.__no  2.__yes

Did you ever seek out a minister, priest, or rabbi for help with personal problems before coming to college?
1.__no  2.__yes

Have you received counseling since coming to college?
1.__no  2.__yes

Have you sought out a minister, priest, or rabbi for help with personal problems since coming to college?
1.__no  2.__yes

Have you considered counseling since coming to college?
1.__no  2.__yes

How seriously have you considered counseling:
NOT SLIGHTLY QUITE EXTREMELY
AT ALL SERIOUSLY

1  2  3  4  5  6  7
How likely would you be to seek out psychological counseling if you felt you needed it?

NOT SLIGHTLY QUITE EXTREMELY
AT ALL LIKELY

1 2 3 4 5 6 7

Are you (check all that apply):
1. _now married
2. _formerly married
3. _engaged to be married
4. _in a love relationship
5. _going steady (but not "in love")
6. _dating regularly
7. _dating occasionally

Have the relationships checked above been formed since you've been at college?
1. _no 2. _yes

How satisfied are you with the social relationships you have formed at college?

NOT SLIGHTLY QUITE EXTREMELY
AT ALL SATISFIED

1 2 3 4 5 6 7

Please answer questions 1a. to 2g. using the following code (write the appropriate number in the spaces provided).
1=mother and father
2=mother and myself
3=father and myself
4=mother and my brother or sister
5=father and my brother or sister
6=my brother/sister and myself
7=a bro/sis with another bro/sis
8=mother and her mother or father
9=father and his mother or father
1. WHEN YOU WERE YOUNGER (between ages 8 and 12), which two family members ... 
   a. had the strongest overall relationship? 
   b. were closest emotionally? 
   c. made most of the decisions (were most in charge)? 
   d. had most similar attitudes and interests? 
   e. were most likely to know what each other was thinking? 
   f. spent most time together? 

   How strong was the relationship cited in 1a. above? 
   NOT               SLIGHTLY          QUITE               EXTREMELY 
   AT ALL            STRONG            
   STRONG            
   1   2   3   4   5   6   7

   How close was the relationship cited in 1b. above? 
   NOT               SLIGHTLY          QUITE               EXTREMELY 
   AT ALL            CLOSE             
   CLOSE            
   1   2   3   4   5   6   7

2. Thinking of the family NOW (since you've come to college), which two family members ... 
   a. have the strongest overall relationship? 
   b. have the second strongest overall relationship? 
   c. are closest emotionally? 
   d. make most of the decisions (are most in charge) 
   e. have the most similar attitudes and interests? 
   f. are most likely to know what each other is thinking? 
   g. spend most time together?
How strong is the relationship cited in 2a. above?

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How close is the relationship cited in 2c. above?

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Rate your relationship with your mother:
-3 -2 -1 0 +1 +2 +3
Rate your relationship with your father:
-3 -2 -1 0 +1 +2 +3
Rate your parents' relationship:
-3 -2 -1 0 +1 +2 +3
Now rate the same relationships more specifically (circle numbers on scales provided):

**MY RELATIONSHIP WITH MOTHER**

distant 1 2 3 4 5 6 7 close
weak 1 2 3 4 5 6 7 strong
conflictual 1 2 3 4 5 6 7 harmonious

**MY RELATIONSHIP WITH FATHER**
distant 1 2 3 4 5 6 7 close
weak 1 2 3 4 5 6 7 strong
conflictual 1 2 3 4 5 6 7 harmonious

**MOTHER AND FATHER'S RELATIONSHIP WITH EACH OTHER**
distant 1 2 3 4 5 6 7 close
weak 1 2 3 4 5 6 7 strong
conflictual 1 2 3 4 5 6 7 harmonious

Is there a sibling who is even closer to the parent you feel closest to?
1. no  2. yes
Is there a sibling who has an even stronger relationship with the parent you feel you have the strongest relationship with?
1. __no  2. __yes

Is there a sibling who has a more "parent like" role in the family than you do?
1. __no  2. __yes

If yes, are these roles taken with regard to you, other brothers/sisters, and/or parents? (Check all that apply)
1. __with regard to me  2. __other bro/sis  3. __parents

How encouraging was your mother in terms of allowing you to move out on your own and take responsibility for yourself?
NOT AT ALL  SLIGHTLY  QUITE  EXTREMELY ENCOURAGING
1  2  3  4  5  6  7

Rate FATHER on same scale:
1  2  3  4  5  6  7

Who would you say was most affected by your leaving home?
1. __mother  2. __father  3. __both same  4. __brother/sister  5. __all equally

How much were they affected?
NOT  SLIGHTLY  QUITE  EXTREMELY AT ALL
1  2  3  4  5  6  7

How difficult has it been to be away from home (how "homesick" have you been?)
NOT  SLIGHTLY  QUITE  EXTREMELY AT ALL
1  2  3  4  5  6  7  DIFFICULT
Using the scale below circle the number that shows how well each statement describes relationships in your family now:

Not At All  
Characteristic  

Very  
Characteristic  

1  2  3  4  5  6  7

**Items Related to Proximity (Interpersonal Involvement)**

1. When I am at home, my mother and father spend free time together.
2. When I am at home, mother and I spend free time together.
3. When I am at home, father and I spend free time together.
4. Mother and father can usually sense each other's feelings.
5. Mother and I can usually sense each other's feelings.
6. Father and I can usually sense each other's feelings.
7. Mother and father know what there is to know about each other.
8. Mother and I know what there is to know about each other.
9. Father and I know what there is to know about each other.
10. Mother and father have private conversations.
11. Mother and I have private conversations.
12. Father and I have private conversations.
13. Mother and father make decisions effectively.
14. Mother and I make decisions effectively.
15. Father and I make decisions effectively.
16. Mother and father are physically affectionate with each other.
17. Mother and I are physically affectionate with each other.
18. Father and I are physically affectionate with each other.
19. Sometimes it seems as if father and mother can almost read each other's minds.
20. Sometimes it seems as if mother and I can almost read each other's minds.
21. Sometimes it seems as if father and I can almost read each other's minds.
Items Related to Differentiation of Parent and Child Roles

22. Mother's authority is seldom questioned.
23. Father's authority is seldom questioned.
24. I tell mother what's bothering me.
25. Mother tells me what's bothering her.
26. I tell Father what's bothering me.
27. Father tells me what's bothering him.
28. I take care of my mother.
29. Mother takes care of me.
30. I take care of my father.
31. Father takes care of me.
32. I give mother advice.
33. Mother gives me advice.
34. I give father advice.
35. Father gives me advice.
36. I tell mother what to do.
37. Mother tells me what to do.
38. I tell father what to do.
39. Father tells me what to do.
40. Mother and I are like sisters.
41. Father and I are like brothers.
42. Mother and I treat each other as equals.
43. Father and I treat each other as equals.
Items Related to the Formation of Coalitions

44. Mother and father are usually in agreement where the children are concerned.

45. Sometimes it is possible for the children to play mother and father against one another to get what we want.

46. Rules for children are determined by mother and father together.

47. Mother and father are together in enforcing rules.

48. Mother and father talk about the children in private.

49. Mother and I talk about father in private.

50. Father and I talk about mother in private.

51. My brother(s) and sister(s) and I talk about our parents in private.

52. Mother and father "gang up" on me.

53. Mother and I "gang up" on father.

54. Father and I "gang up" on mother.

55. My siblings and I "gang up" on our parents.
VITA

Richard J. Wilson

The author was born on November 6, 1958, the youngest of five children. He attended Georgetown University, in Washington, D.C., where he received his B.S. in Psychology in 1980. He also received an M.A. in 1988 from the University of Connecticut in Marital and Family Therapy.