

**PARENT STRUCTURE AND SUPPORT AND ADOLESCENT PROBLEMS:  
DELINQUENCY, SUBSTANCE ABUSE, AND PEER AND SELF-ESTEEM DEFICITS**

by

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(ABSTRACT)

Attachment and family systems theories provided a framework for examining parental structure and support and adolescent delinquency, substance abuse, peer relations, and self-esteem. Three parent scales: support, watchfulness and decidedness, and eight adolescent outcome variables assessing self-esteem, peer relations, and risk-behaviors were derived from the National Educational Longitudinal Study. The sample of 16,749 adolescents was diverse regarding race and ethnicity. All participants were in the tenth grade in the first wave and continued participation in the second wave two years later.

Parental support was hypothesized to be associated with increased self-esteem, positive peer relationships and reduced risk behaviors. Although the research findings support the hypothesis for each of the adolescent variables, support was most related to adolescent self-esteem and peer alienation, consistent with an attachment schema.

The hypothesis that parental watchfulness is linked to a reduction in adolescent high-risk behaviors was not supported. Instead, watchfulness was linked to self-esteem and peer alienation. These findings indicate that watchfulness, similar to support, is more related to internal processes rather than a mechanism for controlling behavior.

Parental decidedness is associated with lower risk behaviors along with lower self-esteem and greater susceptibility to peer alienation. This construct, in contrast to support and watchfulness, presents a different direction of influence depending on the adolescent outcome. The direction of influence of decidedness is negative for self-esteem and peer relations and positive for adolescent risk reduction.

The overall research findings indicate that high amounts of support and watchfulness are related to the most positive outcomes for adolescent self-esteem and peer relations. In contrast, the effect of parental decidedness was less salutary for self-esteem and peer relations. In summary, conclusions from this research have implications for theory and practice. For theory, the understanding of specific linkages between these parenting constructs and adolescent outcomes is advanced in this research. These linkages have implication for extensions and modifications of attachment and family systems theories. For practice, the findings suggest refinement in contemporary parent education and clinical work with families.

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## CHAPTER 1. INTRODUCTION

Although the concepts of family and parent have multiple meanings, family life holds a prominent position in American society. Policies related to families and socialization of children are national concerns, and family values are a dominant theme in contemporary American politics. Though diverse in form, parenting remains a primary vehicle for nurturing and socializing children in American culture. The importance of parenting and the consequences of parent-child interaction for multiple developmental outcomes (Anderson & Sabatelli, 1999) render parenting practices a focus of much public interest and debate.

The present study examines several dimensions of parenting and evaluates the associations with adolescent developmental outcomes. Specifically, the study examines parent-adolescent relationships and the consequences for adolescent self-esteem, peer relations, and problem behaviors. The current study utilizes attachment theory and systems theory as a lens for examining the parent-adolescent relationship and adolescent developmental outcomes. These theories are briefly reviewed below followed by a literature review that summarizes prior empirical work concerning attachment, family systems, and adolescent outcomes.

### Attachment Theory

Attachment theory emerged from Bowlby's interest in childhood behavior problems. Bowlby (1969) opposed the dominant thinking that childhood problems were due to internal drive conflicts, and believed family experience to be the basic cause of disturbance. Bowlby theorized the early attachment relationship as an instinctual process with a primary goal of maintaining proximity to the caregiver. Through dynamic interaction with the caregiver, mediated by behavioral systems and feedback, an attachment bond is established.

The early parent-child attachment relationship necessitates proximity of the caregiver to serve as both a safe retreat during times of stress and a secure base from which the child can explore the environment. Security is felt, and exploration is facilitated, to the extent the caregiver is available and responsive to the child's needs. On the basis of this proximal relationship, the child forms a cognitive schema that serves as a prototype for future relationships and exploration (Bowlby, 1973).

In adolescence, the attachment relationship remains similar in meaning to the earlier relationship, but is expressed by cognitive components such as perceived trust, communication and alienation. Trust is a measure of perceived security that the parent is responsive to the adolescent's emotional needs. Communication refers to the quality of verbal communication between the adolescent and parent, and alienation is a measure of insecure attachment (Rice, 1990).

Attachment theory points to relational bonds within the family context as a primary factor in child and adolescent development. Secure attachment relations are associated with positive development and insecure attachments are related to an increased risk of negative outcomes. According to an attachment paradigm, adolescence is a major transition for integration of personality. Earlier attachment difficulties may be especially problematic during this critical transition leading to an increased risk of developing negative self-concept, peer relations and maladaptive behaviors.

Sroufe, Carlson, Levy, and Egeland (1999) reviewed the dynamic role of early attachment difficulties in the development of psychopathology. According to Sroufe et al. (1999), attachment problems are not direct causes, but initiating conditions in the

development of adolescent psychopathology. Additionally, change in behavior though possible at any stage of development, is more readily achieved if a foundation of early parent-child support is formed.

According to Nezworski, Tolan, & Belsky (1988), a negative model of self and the environment promotes adaptive avoidance of social interactions and interferes with the development of positive peer relationships. In addition, if the child constructs a negative model of the environment, defensive adaptations may develop and lead to the formation of behavior problems. Pathological development from an attachment lens is a deviation from the normal developmental pathway in an attempt to make adaptations.

In summary, transitions during adolescence provide new opportunities for exploration and risks. These risks increase the level of stress and anxiety experienced by the adolescent, therefore increasing the need for a secure base. Adolescents with a secure attachment have incorporated an internal schema or “felt security” that continues to function much like the earlier secure base. This “felt security” is maintained by parent (or caregiver) support and facilitates the adolescent’s ability to safely negotiate the environment and make adaptive developmental changes. Adolescents with parental support are able to retreat to a figurative secure base when confronted with high risk and adaptively avoid potentially dangerous situations. During adolescence parental support maintains the attachment bond by assisting continued exploration while maintaining healthy balance between anxiety and safety issues.

Thus, from previous conceptualization, parent support, though narrower in scope, is representative of the early attachment relationship. Whereas the earlier bond necessitated an interactive physical relationship, the later relationship is maintained by support behaviors such as trust and understanding. Ongoing parental support is likely to function as a protective mechanism against high-risk behaviors and to increase the adolescent’s competence and autonomy. Therefore adolescents without parent support are at higher risk for utilizing maladaptive mechanisms such as substance abuse or delinquency in an attempt to cope.

Moreover, parent support increases the adolescent’s ability to successfully interact with others and form positive peer relationships. As a result, the securely attached adolescent is likely to be sensitive to feedback and less likely to experience peer alienation.

In addition to parental support, watchfulness is another important aspect of the parent-adolescent relationship. Parental watchfulness though not specifically mentioned in attachment theory is conceptually related to the early attachment relationship. In the earlier relationship watchfulness facilitated the caregiver’s ability to interact and respond with the appropriate care. In the later relationship parental watchfulness increases sensitivity between parent and adolescent. Increased adolescent exploration and autonomy signals the attached parent(s) or caregiver to be watchful and provide safety cues. Parental watchfulness may provide a sense of safety for adolescents and, as a result, reduce unsafe exploration such as high substance abuse, high peer pressure, and delinquent behaviors. Consequently, from an attachment perspective, parental support is hypothesized to be associated with a broad array of developmental outcomes. Parent watchfulness, an aspect of behavior within an attachment relationship, is hypothesized to be related to outcomes in high-risk situations such as high level substance abuse or delinquency.

### Family Systems Theory

Family systems theory evolved from general systems theory due to similar interests among therapists and researchers from the early 1950’s and 1960’s. For instance, Bateson, Jackson, Haley, and Weakland looked to family interaction as an explanation of the etiology

of schizophrenia in adolescents. Bowen believed that the bond between mother and child was a factor in the development of schizophrenia in children. He later expanded his view to focus on family interactions. A decade later, Minuchin began his work examining the family interactions of delinquent adolescents. He proposed that a hostile environment interfered with the family's adaptability, which resulted in dysfunction (Kolevzon & Green, 1985).

The major tasks of adolescence are significantly influenced by the family context, and concepts from family systems theory such as cohesion and adaptability are integral to healthy adolescent development. Cohesion refers to the emotional bonding of family members similar to the earlier attachment bond between infant and mother. In the early attachment relationship the caregiver must meet the needs of the infant and establish a secure base from which to explore. In adolescence, new demands for autonomy must be met to allow the adolescent to explore and differentiate from the family while at the same time remaining emotionally connected to the family. Research indicates that adolescents in families with low levels of cohesion (disengaged) are at a higher risk for developing conduct/behavior disorders, substance abuse, and other behaviors problems (Prange, et al., 1992).

The family systems Circumplex Model developed by Olson, Sprenkle, and Russell, (1979) was developed to assess family functioning. The model has two primary dimensions and describes 16 different typologies of family functioning style. The first dimension, cohesion, is defined as the emotional bonding among family members and includes four levels: very low cohesion (disengaged); low to moderate (separated); connected (moderate to high); and very high cohesion (enmeshed).

Adaptability, the second dimension, defined as the amount of change a family is able to manage, also consists of four levels. The four levels of this dimension are: very low (rigid); structured (low to moderate); flexible (moderate to high); and very high (chaotic). Although balance on both dimensions is considered optimal family function, the framework is flexible in acknowledging that different stages of family life require different styles. Families at the extreme points on this model are at greater risk of dysfunction. However, variations in family style due to cultural or ethnic differences are not necessarily considered dysfunctional. Families with adolescent members function best at the flexible/separate region to allow for increased autonomy.

Transitions are critical periods within a family system. How well a family manages transitions is influenced by the family's ability to adapt to the change. Change, in systemic properties, leads to adaptive reorganization of the system to facilitate continued functioning. Family transitions such as those experienced during adolescence are likely to be more challenging to the systems ability to adapt, and consequently heighten the risk for dysfunction to occur (Cox & Paley, 1997).

Parental support evidenced by a reciprocal relationship of trust, understanding, and fairness is an indicator of optimal family cohesion. Similar to the attachment relationship, a cohesive family remains flexible to changes and adapts the levels of emotional support to achieve balance within the system. Moderate levels of cohesion maintain a balance between connectedness and autonomy. Adolescents residing in a family system with very low levels of support are at increased risk of negative behaviors and peer alienation (Cox & Paley, 1997). As with attachment theory, therefore, using a systems perspective, parental support is hypothesized to be related to a wide array of positive development outcomes.

Parental decision making is another parenting construct that reflects hierarchical processes in the family. High activity of parental involvement in adolescent' daily decisions

is a systems response to the adolescent attempts to explore and achieve autonomy. Likewise, this behavior may be evidence that the system is not successfully renegotiating boundaries.

Whereas high levels of parental involvement in adolescent decision-making may reduce adolescent risk behaviors such as substance use and delinquency, it is also likely to hinder other aspects of development. For instance, low levels of autonomy in decision making are associated with a lack of differentiation and lower self-concept (Anderson & Sabatelli, 1999). Furthermore, these adolescents have more difficulty establishing positive peer relationships resulting in greater risk for peer alienation.

Family Systems Theory conceptualizes the family as a functional system with maintaining balance as a primary goal. During the adolescent period, the system is less stable and families must cope with multiple adjustments in roles, boundaries, and amount of support to maintain balance while adapting to the adolescent's ongoing need for autonomy (Walsh & Scheinkman, 1993). Consequently, parent-decision making is hypothesized to be associated with poorer peer and self-concept outcomes, and less delinquency and substance abuse.

### Purpose and Hypotheses

The purpose of the present study was to assess the relationship between parental structure and support and adolescent delinquency, substance abuse, peer difficulties, and self-esteem deficits. Based on both attachment and systems theory, parent support was hypothesized to be associated with a broad array of developmental outcomes. Parent watchfulness, an aspect of behavior within an attachment relationship, was hypothesized to be related to outcomes in high-risk situations such as high level substance abuse or delinquency. Parent-decision making was hypothesized to be associated with poorer peer and self-esteem outcomes, but lower levels of delinquency and substance abuse.

## CHAPTER 2. LITERATURE REVIEW

### Attachment and Adolescent Developmental Outcomes

A review of recent studies linked parental attachment to several important aspects of adolescent development such as identity, social and emotional adjustment, self-concept, and adaptive functioning (Rice, 1990). Armsden and Greenberg (1987) developed the Inventory of Parent and Peer Attachment (IPPA) as a measure of adolescent attachment and well being. Three factors from this instrument (trust, communication, and alienation) assess the parent-adolescent attachment relationship. Findings from the IPPA reported a positive correlation with parental attachment and adolescent self-concept, self-esteem, life satisfaction and healthy family environment. Additionally, higher parent attachment scores were related to adaptive emotional functioning in adolescence.

Benson, Harris, and Rogers (1992) examined the relationship between attachment and identity among adolescents and found a positive relationship between attachment and identity achievement. Additional findings reported by Benson et al., was a relationship between life satisfaction and attachment bonds. Similarly, Lapsley, Rice, and Fitzgerald, (1990) found attachment relations related to personal and social identity and college adjustment. College students with warm supportive parent and peer attachments scored higher on personal and social identity measures.

In a study evaluating attachment and expectations of social support during transition to high school, Larose and Boivin (1999) found perceived parent security of high-school students a predictor of socioemotional adjustment in college. Pfaller, Kiselica, and Gerstein, (1998) assessed the attachment styles and family dynamics in college students. Participants with a secure attachment in this study reported significantly higher levels of family cohesion, adaptability, and satisfaction.

Kenny (1987) developed the Parental Relationship Questionnaire (PRQ) to measure parent-adolescent attachment relations and interpersonal functioning. Findings from this research reported a relationship between attachment and social competence. Additional findings linking parent-adolescent attachment and social competence and assertion were reported by Kobak and Sceery (1988) utilizing the Adult Attachment Interview (AAI) developed by George, Kaplan, and Main (1985). The AAI assesses the adult internal representation of the early attachment relationship according to three classifications of attachment: autonomous-secure; preoccupied; and dismissing. The AAI scales correspond with the early attachment ratings of secure, ambivalent and avoidant.

Allen, Hauser, and Borman-Spurrell (1996) examined adolescent psychopathology from an attachment framework with a sample of 66 adolescents receiving inpatient psychiatric care and 76 matched high school students. Psychiatric hospitalization was predictive of insecure adult attachments eleven years later. Forty-five percent of the high school sample was classified as secure and only eight percent of the hospitalized adolescents reported secure attachments. Furthermore, those participants with dismissing attachments reported more criminal behavior than participants with secure attachments. Related findings linking a dismissing attachment representation and conduct disorder were reported by Rosenstein and Horowitz (1996). This study evaluated attachment and psychopathology in a psychiatric group of adolescents and found a relationship between a dismissive attachment and adolescent conduct disorder and substance abuse.

Although not directly assessing the attachment relationship, Holcomb and Kashani (1991) evaluated family life in a community sample of adolescents diagnosed with conduct disorder. The adolescents in this study that met the criteria for conduct-disorder reported a lack of family support and nurturance.

The influences of family functioning on attachment organization and psychopathology were investigated by Reimer et al. (1996) in a psychiatric sample of adolescents. Adolescents with externalizing symptomatology and dismissive attachment representations reported significantly lower levels of familial responsiveness. A dismissive attachment describes detached and avoidant behaviors. This classification was derived from the individuals self-report of the early attachment relationship on the AAI (George et al., 1985).

Adolescent psychopathology is frequently classified as internalizing or externalizing behaviors. The internalizing symptoms are directed to self and associated with inhibited or overcontrolled behavior. Externalizing symptoms are manifested in behaviors directed outwardly such as conduct/behavior disorders, delinquency, or substance abuse (Reimer et al., 1996).

In summary, the role of attachment processes in adolescence appears to be ongoing and significantly contributing to multiple aspects of development. The attachment schema serves as a lens with which the adolescent views the world and establishes relationships.

### Family and Adolescent Delinquency

Research on family systems and related concepts and adolescent outcomes suggests associations between ineffective parenting and adolescent behavioral problems. A developmental model of antisocial behavior cites ineffective parenting practices as the first step in determinants for the development of conduct/behavioral disorders (Patterson, DeBaryshe, & Ramsey, 1989).

In a literature review, Frick (1993) found several parental socialization practices consistently linked to adolescent behavior problems. A lack of parental involvement in their child's activities was significantly related to severe conduct problems. Additionally, a lack of parental supervision and knowledge of the adolescent's activities and harsh or inconsistent parental discipline were recurring practices linked to adolescent behavior/conduct problems. Simons, Lin, and Gordon, (1998) evaluated the effects of family socialization on delinquency and violence in adolescent males. Low parental support was associated with violence and other delinquent behaviors.

Forehand, Miller, Dutra, and Chance (1997) found an association between parental monitoring and low levels of adolescent deviant behavior. Similar findings linking poor parental monitoring and adolescent behavior problems were also reported by Ary et al. (1999).

Barber (1992) evaluated family correlates of adolescent problems and found a lack of parental supervision and poor parental control linked to adolescent problem behavior. In a later study, Barber, Olson, and Shagle (1994) assessed parental behavioral control and the associated behavioral outcome in adolescents. Insufficient behavioral control was defined as disengaged with a lack of parental control, restrictions, or rules. Results from this study found a significant relationship between insufficient parental behavioral control and adolescent externalizing behaviors.

In addition to parental supervision and control, further research indicates that family cohesion and support are associated with adolescent behavioral outcomes. Prange, et al.

(1992) found a relationship between disengaged families and increased risk of developing substance abuse, conduct/behavior disorders, and other behavior problems. In a related study of 84 adolescents, several family variables were linked to delinquent behavior. However, the most significant factor was the association between desired low levels of family cohesion and adolescent delinquent and antisocial behavior (Tolan, 1988). Farrell and Barnes (1993) found higher levels of cohesion resulted in greater family functioning for parents and adolescents. Dremen and Ronen (1997) examined adolescent behavior problems and divorced mothers' perceptions of family cohesion and adaptability. Results from this study reported fewer adolescent behavior problems when mother's perceived family cohesion and adaptability as high.

The family systems construct differentiation is assessed by the family's tolerance for individuality and emotional closeness. Gavazzi (1993) examined differentiation levels in families of adolescents receiving therapy for adolescent behavior problems. Gavazzi found that low levels of family differentiation were linked to adolescent problem behaviors associated with school, peers, and illegal activities.

Coercive punishment is cited as another predictor of adolescent problems. In a recent meta-analysis of parental caregiving and child externalizing behavior, Rothbaum and Weisz (1994) found a positive correlation between parental coercion and adolescent externalizing behavior. In addition, negative correlations were found for parental measures of approval, guidance and motivational correlations with externalizing behavior.

Cohen and Brook (1987) assessed family risk factors related to future development of adolescent psychopathology in an eight-year longitudinal study. Harsh parental punishment was strongly related to present and future conduct disorder in this study. Related findings by Coughlin and Vuchinich (1996) reported a relationship between parent-child relations, parental discipline practices, family structure, and adolescent police arrest.

Lorenz, Hoven, Andrews, and Bird (1995) report similar effects in a group of adolescents with psychiatric problems. Marital discord and punitive punishment practices were significantly related to child and adolescent disorders. Parental monitoring was reported as the strongest protective factor in this study.

Whittaker and Bry (1992) in an observational study of marital interaction and adolescent behavior problems found a relationship between high levels of parental conflict and adolescent problems behaviors such as substance abuse, difficulty with the law, and school and family difficulty. Similarly, Buehler et al. (1998) evaluated the parental conflict styles and adolescent problem behaviors and found a strong relationship between parental conflict and adolescent problem behavior. Peterson and Zill (1986) provide additional support and reported a relationship between families with high marital and family conflict and antisocial behavior in adolescence.

Whereas family dysfunction is associated with maladaptive behavior in adolescents, interventions targeting the family context have been successful in strengthening families and treating adolescent behavior problems (Chamberlain & Rosicky, 1995; Eastwood, Sweeney, & Piercy 1987; Protinsky & Shilts, 1990). Bredehoft and Hey (1985) evaluated a family intervention program with families and adolescents and found that families completing the program scored significantly higher than controls on measures of adaptability, cohesion and conflict resolution.

In summary, these research findings point to multiple family processes and more specifically, parent-adolescent interactions as contributing factors in adolescent

developmental outcomes. A family systems lens suggests that maladaptive family interactions such as poor cohesion, rule or boundary issues, or lack of flexibility contribute to the development of adolescent behavior problems. Furthermore, findings indicate that intervention at the family level has been effective as a protective mechanism in preventing problems as well as reducing problem behaviors.

### Family and Adolescent Substance Abuse

Denton and Kampfe (1994) in a review of the literature found two broad categories of family characteristics associated with adolescent substance use. The first category, parent substance use, was highly related to adolescent substance use. Family atmosphere, the second broad category linked to adolescent substance abuse included family structure, parenting factors such as communication, parental involvement, parental discipline, and discrepancies in perceptions of family members. Adolescent substance abusers in this review described the family environment as hostile, and lacking love, cohesiveness, and cooperation.

Barnes, Farrell, and Cairns (1986) reported similar findings. In this study, a lack of parental support was highly related to adolescent alcohol abuse, and additionally, heavy alcohol use in adolescence was associated with having alcohol-abusing parents. Several related studies cited family factors such as weak affectional parent-adolescent bonds, a lack of family support and communication (Spoth, Redmond, Hockaday, & Yoo, 1996), lack of parental support (Simons, Lin, & Gordon, 1998; Hundleby & Mercer, 1987), and lower levels of family cohesion (Crowe, Philbin, Richards, & Crawford, 1998; Protinsky & Shilts, 1990) as strong correlates of adolescent substance problems.

Additional findings reported that parental conflict (Whittaker & Bry, 1992), and family structure were related to adolescent substance abuse. Hoffman and Johnson (1998) found that the risk of substance abuse in adolescents is highest in father-only households. Weishaw and Peng (1993) reported that amount of time the adolescent spent at home alone was a predictive factor of adolescence substance abuse.

Among the protective factors associated with alcohol abstinence tendency were adolescents that resided in two-parent families (Hoffmann & Johnson, 1998), family religious involvement (Bahr, Maughan, Marcos & Li, 1998) affiliation with prosocial peers, and intervention focused on parent-adolescent interactions (Protinsky & Shilts, 1990; Spoth et al., 1996). Bird and Kemeraite (1990) investigated emotional stress in adolescents and found family coping methods effective in reducing stress. Increased family coping strategies may be protective factors for substance abuse.

In summary, adolescent substance abuse was highly related to the family context in this review of the literature. Multiple family interactions, family structure, and parental substance use were strong predictors of adolescent substance abuse though it is less clear which of these family factors is most related. Additionally, these findings suggest that intervention at the family level is an appropriate context for both treatment and prevention of adolescent substance abuse.

### Family and Adolescent Self Concept

Research findings support a connection between family interactions and adolescent self-concept. Spoth et al. (1996) reported a relationship between parent-adolescent bonds and adolescent self-esteem. In an earlier study, Hoelter and Harper (1987) examined the effects of structural and interpersonal family influences on adolescent self-concept. The results indicate that family support was related to adolescent self-esteem.

Similar findings by Dekovic and Meeus (1997) report a positive relationship between parental acceptance and adolescent self-concept. In several related studies, positive parent-adolescent attachments were linked to adolescent self-esteem (Armsden, McCauley, Greenberg, Burke, & Mitchell, 1990), adolescent self-esteem, competence, identity and emotional adjustment (Rice, 1990) and self-esteem and life satisfaction (Armsden & Greenberg, 1987; Greenberg, Seigal, & Leitch 1983).

Gray and Steinberg (1999) evaluated the effects of parental acceptance-involvement, parental monitoring, and parental support of adolescent autonomy on aspects of adolescent development. Results from this study found a strong relationship with both autonomy granting and parental acceptance-involvement on psychosocial competence in adolescence.

Lyman and Bird (1996) evaluated aspects of self-image and emotional health in adolescents placed in foster care. The findings indicate that foster care is associated with lower scores on measures of self-image. Insecure attachment relationships underlie a negative self-concept in adolescence (Allen et al., 1996). Insecure attachments result in the construction of negative schemas of self and the environment, which contributes to the formation of a poor self-concept.

Demo and Acock (1996) evaluated the effect of family structure and family process on adolescent emotional adjustment and well being. Significant differences were found in family type and process with the greatest differences found in the family process variables. Measures of mother-adolescent interactions were significantly related to adolescent adjustment. Lower levels of interaction between the mother and adolescent were associated with lower levels of perceived self, adjustment, and well being. In a related study Young, Miller, Norton, and Hill, (1995) found parental support predictive of adolescent well being.

A related study found that perceived parental competence was linked to adolescent psychosocial development. Bogenschneider, Small, and Tsay (1997) examined perceived parental competence and adolescent psychosocial competence in adolescents and found higher psychosocial competence in adolescents with competent parents. Factors that were associated with parental competence in this study were adolescent openness to socialization and parenting stress.

In summary, these findings suggest that the family context and parenting processes play an important role in the development of a positive self-concept in adolescents. Parent support behaviors that convey emotional closeness yet facilitate autonomy in adolescence were most frequently cited as having a positive effect on self-concept.

### Family and Adolescent Peer Relations

Parent-adolescent interactions may play an important role in shaping adolescent-peer relationships. As the adolescent becomes more autonomous, the family's adaptive response allows the child to move into a larger social circle. Adolescents with parents that inhibit this process have difficulty moving into a wider social circle and establishing positive peer relations (Anderson & Sabatelli, 1991).

Dekovic and Meeus (1997) and Kenny (1987) found an association between warm, supportive parent-adolescent relationships and positive peer relations. Similar findings by Larose and Boivin (1999) were a relationship between adolescent's report of parental support and positive expectations in peer relationships. O'Connor, Hetherington, and Clingempeel (1997) found that family relationships were predictive of adolescent social competence.

In a narrative and meta-analytic review of attachment in adolescence, attachment to parents was consistently linked to interpersonal competence (Rice, 1990). Research by

Sroufe et al. (1999) supports the findings relating early attachment experience and the formation of peer relationships. Sroufe and colleagues found those individuals with a history of insecure or avoidant attachment relations have greater difficulty achieving and maintaining positive social relationships.

The association between problematic parenting or attachment relationships and poor peer relations, however, may be complex. According to Patterson et al. (1989), disrupted family processes contribute to alienation by the normal peer group, but to increased membership in a deviant peer group. Hagel and Newburn (1996), for example, reported strong ties to the peer group among a group of frequently arrested adolescents. Though characterizing family life as disruptive and chaotic, peers were viewed more positively.

### Other Contexts

Although the parent-child relationship is the unit of analysis in the present study, general systems theory, on which family systems theory is based, posits multiple influences within larger systems (von Bertalanffy, 1968). In addition, Bronfenbrenner's ecological theory (1979), an extension of these systems ideas to human developmental processes, conceptualizes development as taking place within various nested systems each contributing to an individual's developmental process. The family microsystem is one of many systems interfacing with the developmental process. In addition, other systems impinging on individual development include peers, schools, neighborhood, community organizations, parent's work, media, and broad cultural processes. While the parent-child relationship fails to explain all the variance in human development, it is an important dimension in understanding the ecological process in human development.

### Summary

Because of the potential importance of parent-child interaction, the present study was designed to assess the relationship between parental structure and support and adolescent delinquency, substance abuse, peer difficulties, and self-esteem. The literature review above provides additional bases for the hypothesis that parent support is associated with a broad array of developmental outcomes. Although not addressing parental support directly, related constructs from prior research cited above are consistently related to positive outcomes for adolescents. The consistency of these related findings provides additional basis for the hypothesis regarding the influence of parental support on a broad array of adolescent outcomes.

There is less direct support for the hypothesis that watchfulness will be related to outcomes in high-risk situations such as high level substance abuse or delinquency. The prior studies relating low supervision and monitoring to higher delinquency behaviors provides limited support for the hypothesis concerning watchfulness and high end risk behaviors.

Regarding parental decision making for the adolescent, prior direct assessment of this construct, or even related constructs, are lacking. Consequently, there is no direct empirical support for the hypotheses developed in the introduction based on systems theory. It awaits empirical testing, therefore, to examine the hypotheses that parent decision making will be associated with poorer peer and self-concept outcomes, but also less delinquency and substance abuse.

## CHAPTER 3. METHOD

The present study examined the data on 16,749 adolescents drawn from the National Education Longitudinal Study (NELS). The National Center for Education Statistics (NCES) at the U.S. Department of Education designed the NELS sampling plan (NCES, 1992, 1994). Using a two-stage stratified probability design, a nationally representative sample of schools and students were selected. Schools were stratified according to the estimated enrollment of eighth-grade students, and by geographic region, school type (public or private), urbanicity and minority enrollment. In the second stage, eighth-grade students were randomly selected from each participating school. The sample was “freshened” in 1990 and 1992 with additional eligible students to create representative tenth grade and twelfth grade samples. The NCES User Manual (NCES, 1992,1994) provides additional specific information regarding details of the sampling plan.

### Current Sample

For the present study, all of the participants were in the tenth grade in 1990 and participated in both the 1990 NELS assessment and the 1992 NELS follow-up. Appendix A presents the specific selection rules for this study according to the NELS variable names. Besides the 16,749 adolescents, an additional 1005 adolescents participated in the 10<sup>th</sup> grade, but not the 1992 follow-up, and were therefore excluded from the study.

As seen in the frequency data in Table 1, the current sample included 8,320 males and 8,429 females. The sample was diverse with respect to race and ethnicity as indicated by the frequency and percentages presented in Table 1.

The race/ethnicity composition is similar to the overall national statistics (World Almanac, 1997), with the exception that the proportion of Asian (6.7%) and Hispanic (12.3%) participation was slightly overrepresented in the sample relative to national proportions for Asian (4%) and Hispanic (11%). Conversely the proportion of Black (9.6%) and White (70.3%) participation is slightly lower in the current sample relative to national proportions for Black (13%) and White (73%). Ability levels of students were slightly higher than national norms (standardized t score = 51.5).

Table 1

Frequency Data by Gender and Race

Background Variable	Frequency	Percent	Cumulative Percent
<b>Gender</b>			
Male (1)	8320	49.7	49.7
Female (2)	8429	50.3	100.0
Total	16749		
<b>Race</b>			
Asian, Pacific Islander (1)	1122	6.7	6.7
Hispanic (2)	2043	12.3	19.0
Black, Not Hispanic (3)	1606	9.6	28.6
White, Not Hispanic (4)	11717	70.3	99.0
Am Indian, Alaskan (5)	168	1.0	100.0
Total	16656		

Note. Overall N = 16, 749. SES and Ability were measured using continuous metrics. See text for information on these.

## Data Collection Procedures

Field interviewers with the National Opinion Research Center collected the NELS data (NCES, 1992, 1994). This included administering questionnaires to adolescents, primarily during in-school sessions. Students first completed a 45-minute questionnaire followed by an 85-minute series of four achievement tests assessing academic areas of mathematics, science, reading and social studies. The data were collected in the spring semesters. All data utilized in the present study were drawn from the 1990 and 1992 student component of the NELS.

In addition, to the adolescent questionnaires, the NELS also included datasets from teachers, parents, and administrators. Because these additional data sources had substantial missing data or very limited relevance to study constructs, the student dataset was the focus of the present study.

## Measures

The components of the 1990 and 1992 NELS data were carefully and thoroughly examined for items relevant to the constructs of the study. Specifically, item labels, stems, and response choices were studied for any items related to parenting, adolescent self-concept, peer relations, and adolescent risk behaviors. Data with sufficient relevance from the 1990 and 1992 assessments were selected to create a subset. In addition, four composite variables (Gender, Race, SES, and Reading/Math comprehension) from the 1990 student data were selected as background variables. Next, variables in the subset were recoded for missing values and exploratory factor analyses and reliability analyses were conducted to aid in the empirical and conceptual construction of multiscales.

In addition to the four background variables, 11 scales were constructed assessing constructs relevant to the research questions in this study. Three of the scales assessed parenting constructs and the remaining eight scales assessed adolescent self-esteem, peer relations, and risk behaviors. Each variable is measured on a continuous scale with verbal anchors. Table 2 presents the scale characteristics including number of items, range, mean, standard deviation

### Background

Gender. This background variable was constructed from the student self-report questionnaire and coded 1 for male and 2 for female (See Table 1).

Race. Information from the student self-report questionnaire was used to construct this background variable. Table 1 lists the categories and frequencies data for race.

SES. The composite for family SES was constructed by NCES using values from five standardized items from the base year parent and student questionnaires: father's education level (BYP30), mother's education level (BYP31), father's occupation (BYP34B), mother's occupation (BYP37B), and family income (BYP80). Occupational data were recoded using the Duncan Socioeconomic Index (Duncan, 1961) scale. The SES composite range is from -3.290 to 2.762 with a mean of 0, and SD of .81.

Reading/math comprehension. Cognitive tests assessing reading comprehension and math from the 1990 survey were used to construct this composite variable. Because multiple forms of the test were administered, raw scores were not reported in the data set. Instead, Item Response Theory (IRT) scoring methods were used to score the student tests and then transformed to a standard T scale. IRT scoring assesses overall pattern of responses and

allows for comparison between multiple forms of a test. The range for ability is from 30.27 to 71.82 with a mean of 51.54, and SD of 10.00.

#### Parent Measures

Perceived parental support. This scale included six items measuring parental support with response choices ranging from 1 (*false*) to 6 (*true*). The six items assessed the adolescent's perception of the parent-adolescent relationship including parental fairness, understanding, trust, and pride. Higher score reflect higher levels of perceived parental support.

Parental decidedness. This scale was comprised of eight items asking about who makes decisions with response choices ranging from 1 (*student*) to 5 (*parent*). The eight items assessed the adolescents perception of who makes the decisions related to school activities, classes, sports, college choice, friends, dating, job, and personal spending.

Parental watchfulness. Five items assessing parental knowledge of the adolescent's friends and activities were included in this scale with response choices ranging from 1 (*don't know*) to 5 (*knows a lot*). These items assessed the adolescent's perception of parental knowledge about friends and how time and money are spent by the teen. The higher score on this scale indicates higher levels of parental watchfulness.

#### Adolescent

Self-esteem. This scale included nine items with response choices ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). These items assessed the adolescent's positive self worth, pride, self-satisfaction, and perceived ability to do things as well as others. The higher score on this scale indicates the most positive self-concept.

Peer alienation. This scale included eight items related to peer relationships. The eight items assessed how well the adolescent gets along with others and fits into a group. These items included different response scales; consequently each one was standardized prior to averaging the items. The higher score on this standard scale indicates higher levels of peer alienation.

Peer pressure. Three items assessing the importance among peers to engage in adult behaviors were included in this scale with response choices ranging from 1 (*not important*) to 3 (*very important*). These items assessed peer influence on the adolescent to drink, party and have sex. The higher score on this scale indicates higher levels of peer pressure.

Alcohol use. Four items were included in this scale with response choices ranging from 0 (*zero occasions*) to 3 (*twenty + occasions*). These items assessed the number of times the adolescent drank alcohol ever, in the last year, in the last month, or excessively. The higher score on this scale indicates higher alcohol use.

Marijuana use. This scale included three items with response choices ranging from 0 (*zero occasions*) to 3 (*twenty + occasions*). These items assessed the number of times the adolescent used marijuana ever, in the last year, or in the last month. The higher score on this scale indicates higher marijuana use.

Cocaine use. Three items were included in this scale with response choices ranging from 0 (*zero occasions*) to 3 (*twenty + occasions*). The three items assessed the number of times cocaine was taken ever, in the last year, or in the last month. The higher score on this scale indicates higher cocaine use.

Delinquency. This scale included four items with response choices ranging from 0 (*never*) to 5 (*more than fifteen times*). The four items assessed the number of times the

adolescent was suspended, transferred for disciplinary reasons, arrested, or placed in a juvenile center. The higher score on this scale indicates higher number of penalties.

Misconduct. This scale included seven items that assessed the number of times the adolescent was late for school, skipped school, missed school, got into trouble at school, and received in-school suspension. These items included different response scales, consequently each item was standardized. The higher score on this standard scale indicates higher levels of school misbehavior.

Table 2

Measures in the Study: Scale and Distribution Characteristics

Measure	# Items	Response Range	n <sup>a</sup>	M	SD	Alpha
<b>Parent</b>						
Parental Support	6	false (1)-true (6)	15629	4.73	1.02	.80
Parental Decidedness	8	student(1)-parent(5)	14850	1.87	0.74	.80
Parental Watchfulness	5	don't know (1)-a lot (5)	15429	3.84	0.86	.84
<b>Student</b>						
Self-Esteem	9	disagree (1) - agree (4)	14160	3.10	0.47	.85
Peer Alienation	8	-.84 – 3.20 <sup>b</sup>	15647	0.00	0.62	.77
Peer Pressure	3	not imp(1)–very imp (3)	14568	1.80	0.59	.76
Alcohol Use	4	zero (0) – > twenty (3)	13618	1.24	0.87	.86
Marijuana Use	3	zero (0) – > twenty (3)	12903	0.35	0.70	.88
Cocaine Use	3	zero (0) – > twenty (3)	12902	0.04	0.25	.83
Delinquency	4	never (0) - > fifteen (5)	15521	0.04	0.23	.82
Misconduct	7	-.87 – 4.97 <sup>b</sup>	15528	0.00	0.62	.72

<sup>a</sup> Although the overall N = 16,749 occasionally cases were missing some item data.

When a case lacked data for more than half of the items on a scale, the scale was treated as missing.

<sup>b</sup> Standardized items were averaged to yield the scale score.

Data Analysis

Analyses were conducted to evaluate the relationship between parental support, watchfulness and decidedness, and adolescent self-esteem, peer relations, and risk behaviors. The following characteristics were included as background variables: socioeconomic status (SES), race (white/other), gender, and a composite score for reading and math comprehension. Appendix B presents detailed information on the construction of these scales and background variables.

In addition, the parent variables were analyzed for curvilinearity.

## CHAPTER 4. RESULTS

The analysis of data is reported in two sections of this chapter. In the first section, the linear bivariate relationships among variables are presented. In addition, SES and gender across variables in the study are reported in this section. The second section presents the relationships between levels of parenting behavior and the adolescent outcomes. This section includes curvilinear analysis and analysis of covariance, one-way and two-way.

### Linear Bivariate Relationships Among Variables in the Study

#### Correlation Coefficients

Table 3 contains the means, standard deviations, and Pearson correlation coefficients for each of the variables included in the study. The six adolescent risk variables were intercorrelated with a median correlation of .35 and a range from .10 to .52. Correlations among the three parent variables were, support and watchfulness .107, support and decidedness -.047, and decidedness and watchfulness .193. In addition, SES, race, and reading/math comprehension are intercorrelated ranging from .23 to .49.

#### SES Across Variables in the Study

As shown in Table 3, higher SES was associated with more support and watchfulness. Additionally, higher SES was linked to greater self-esteem and less peer alienation. Higher SES was also related to fewer problems with cocaine use, delinquency and misconduct. For the less severe substance abuse behaviors, however, higher SES was related to more alcohol use, marijuana use, and peer pressure.

Table 3

Pearson Correlations, Means, and Standard Deviations of Background, Parent, and Student Measures

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 Gender	--														
2 Race	-.007	--													
3 SES	-.027	.269	--												
4 Read/Math	.037	.239	.485	--											
5 Parent Support	-.032	.011	.066	.126	--										
6 Parent Watchful	.144	.037	.113	.133	.107	--									
7 Parent Decide	.106	-.061	-.017	-.102	-.047	.193	--								
8 Self Esteem	-.081	-.008	.130	.194	.309	.078	-.057	--							
9 Peer Alienation	-.073	-.065	-.114	-.161	-.287	-.143	.101	-.275	--						
10 Peer Pressure	-.235	.075	.031	-.092	-.106	-.062	-.081	-.080	-.017	--					
11 Alcohol Use	-.163	.157	.079	-.054	-.131	-.068	-.135	-.066	-.066	.499	--				
12 Marijuana Use	-.085	.074	.049	-.044	-.173	-.067	-.095	-.082	-.002	.303	.493	--			
13 Cocaine Use	-.056	.004	-.035	-.079	-.095	-.050	-.017	-.089	.031	.128	.219	.419	--		
14 Delinquency	-.102	-.008	-.043	-.118	-.067	-.048	.006	-.092	.046	.102	.149	.204	.352	--	
15 Misconduct	-.136	-.008	-.036	-.160	-.199	-.075	-.080	-.143	.034	.316	.447	.515	.368	.457	--
M	1.50	0.70	0.05	51.54	4.73	3.84	3.10	0.00	1.84	3.10	1.24	0.35	0.04	0.04	0.00
SD	0.50	0.46	0.81	10.01	1.02	0.86	0.47	0.62	0.59	0.47	0.87	0.70	0.25	0.23	0.62

## Gender Across Variables in the Study

The direct bivariate effects of gender were examined through a series of t-test comparisons. These comparisons are presented in Table 4. Though the sample size enables a sufficient power level so that all comparisons are significant, several comparisons had effect size differences greater than .20. Compared to their sons, parents were more watchful and more involved in decision-making with daughters. In addition, boys scores were higher than the girls for peer pressure, alcohol use, delinquency and misconduct.

Parent Support, Watchfulness, and Decidedness Levels with Adolescent Outcomes

## Curvilinear Analysis and Parent Levels

Aside from the linear relationships reported above, the initial study hypothesis suggested the need for tests of curvilinearity. These initial tests indicated marked presence of curvilinearity particularity for the decidedness variable as it related to the adolescent outcomes. In addition, several interactions were found.

Due to the complex nature of the parental decidedness variable, splitting into three groups was necessary to examine the effects. For clarity of presentation and comparability of analysis, all three of the independent variables, parental support, parental watchfulness, and parental decidedness were split into three groups. Due to a large sample size, splitting the variables into groups did not substantially undermine the study power.

A tripartite proportional split was made for support and watchfulness. Inspection of the decidedness variable indicated, however, that most of the curvilinearity occurred in the range between 1 and 3. In addition, scores higher than 3 reflected that parents decided more, and scores of 1 indicated that the adolescent made the decisions. Consequently, decidedness was split into three meaningful groups; adolescent decides (less than 1.5) parent and adolescent negotiate decisions (1.5-3.0), and parent decides (greater than 3).

The figures presented in this results section illustrate linear and curvilinear relationships. Figures 1 – 8 illustrate a linear effect of support. Higher parental support was associated with greater self-esteem, lower peer alienation, and lower risk behaviors. Figures 9 – 16 demonstrate the linear relationship between watchfulness and each of the adolescent outcomes. The sharpest slopes for the watchfulness variable were found for self-esteem and peer alienation with higher watchfulness related to more salutary outcomes for both self and peers. The curvilinear relationship between parent decidedness and adolescent self-esteem, peer relations, and risk behaviors is illustrated in Figures 17 – 24.

Table 4  
Study Variables: Means and Standard Deviation by Gender

Variable	By Gender				
	Male		Female		
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
<b>Background</b>					
SES	0.07	0.81	0.03	0.82	
Read/Math	51.17	10.31	51.90	9.69	
<b>Parent</b>					
Support	4.76	.97	4.70	1.06	
Watchfulness	3.71	0.89	3.96	0.80	*
Decidedness	1.79	0.77	1.94	0.70	*
<b>Adolescent</b>					
Self Esteem	3.14	0.47	3.06	0.48	
Peer Alienation	0.05	0.65	-0.04	0.59	
Peer Pressure	1.98	0.60	1.70	0.55	*
Alcohol Use	1.39	0.93	1.11	0.78	*
Marijuana Use	0.41	0.77	0.29	0.62	
Cocaine Use	0.06	0.30	0.03	0.19	
Delinquency	0.06	0.31	0.01	0.12	*
Misconduct	0.09	0.72	-0.08	0.51	*

\* Effect size >.20

Figure 1. Parental Support and Adolescent Self-Esteem.

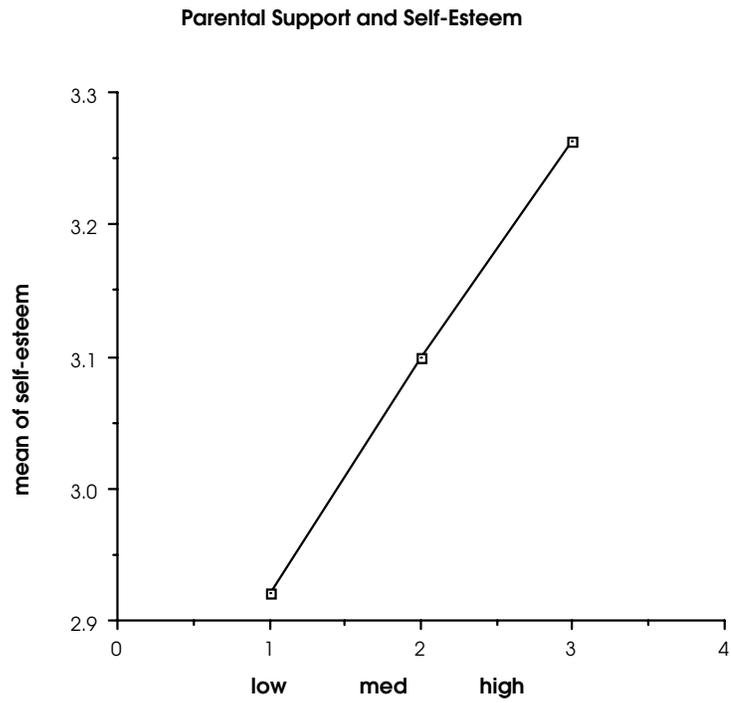


Figure 2. Parental Support and Adolescent Peer Relations.

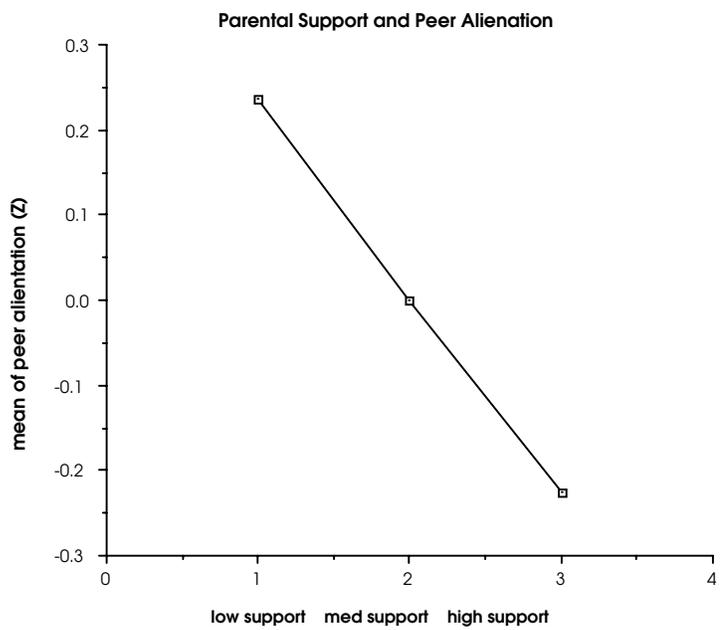


Figure 3. Parental Support and Adolescent Peer Pressure.

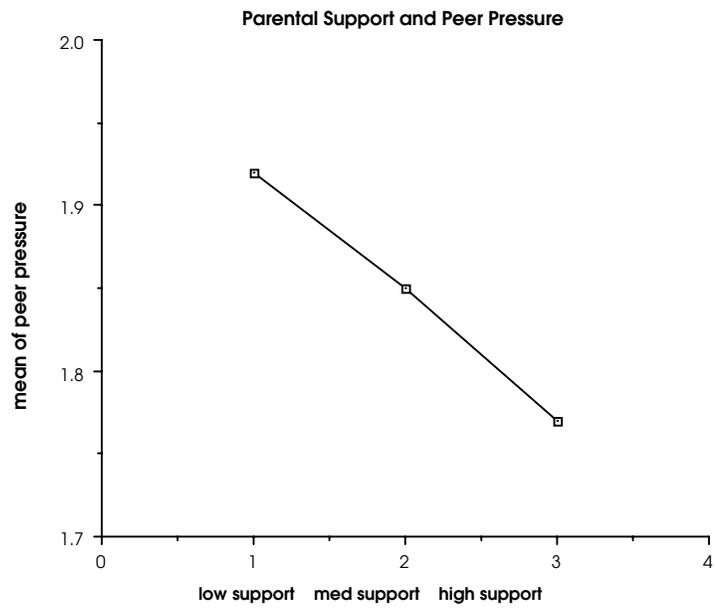


Figure 4. Parental Support and Adolescent Alcohol Use.

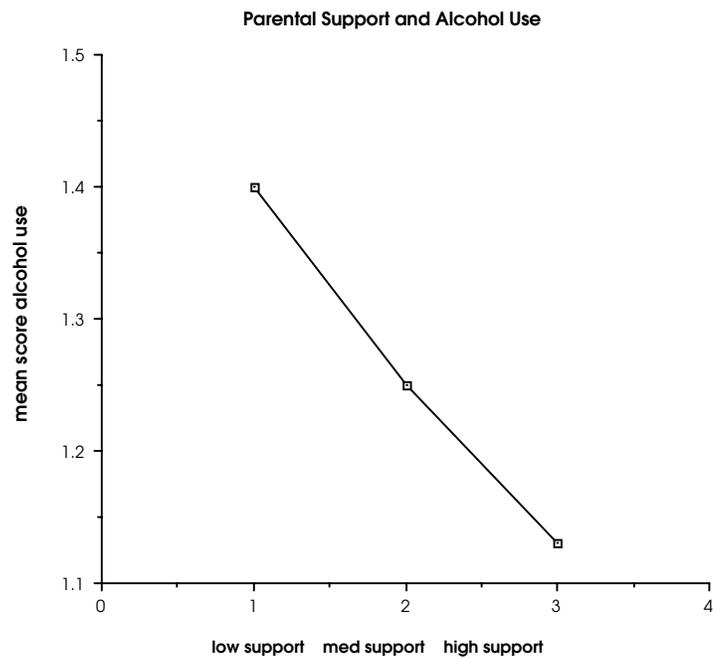


Figure 5. Parental Support and Adolescent Marijuana Use.

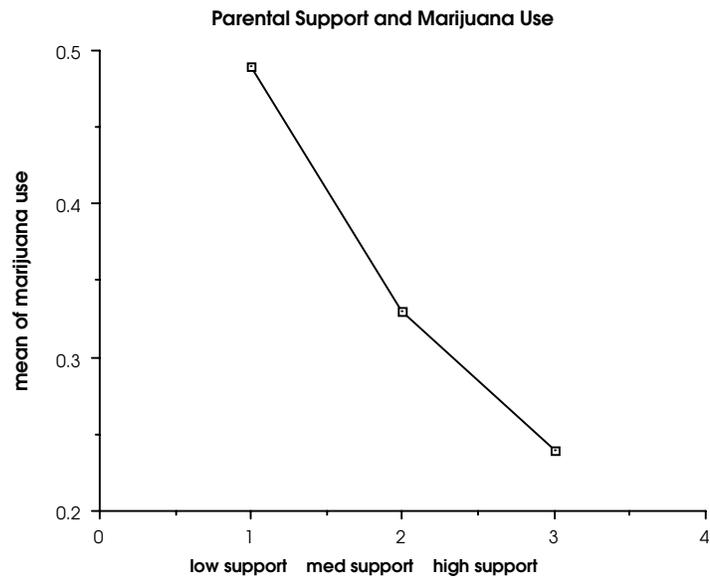


Figure 6. Parental Support and Cocaine Use.

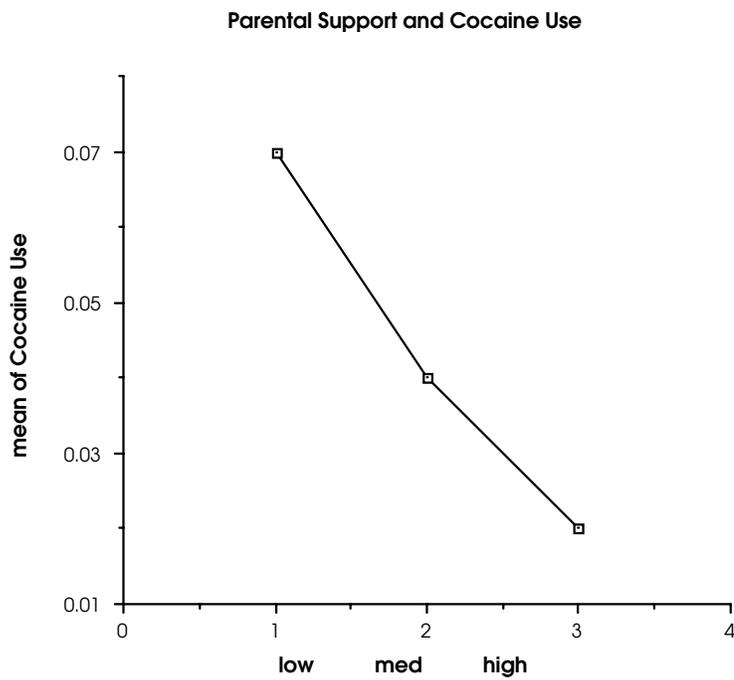


Figure 7. Parental Support and Adolescent Delinquency.

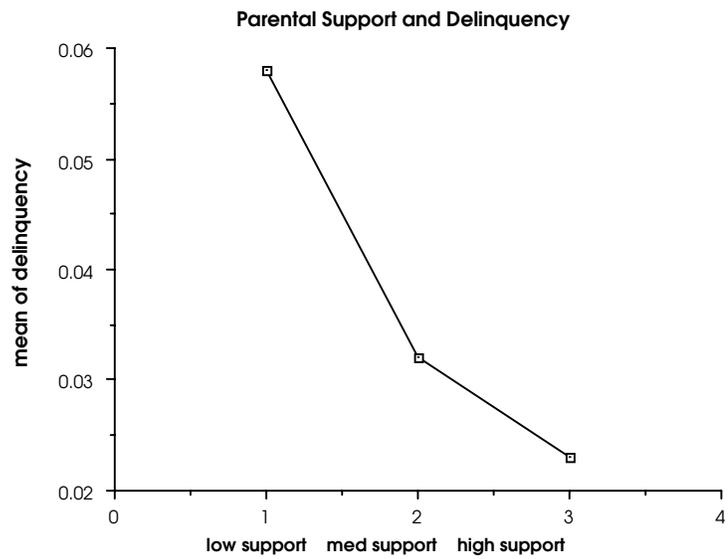


Figure 8. Parental Support and Adolescent Misconduct.

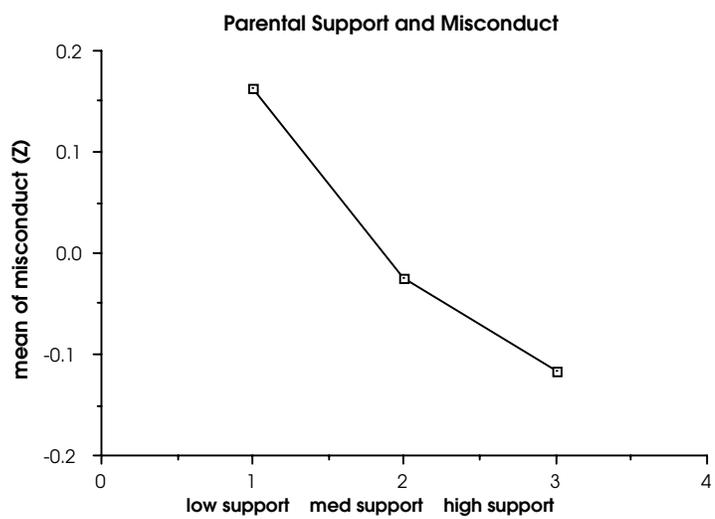


Figure 9. Parental Watchfulness and Adolescent Self-Esteem.

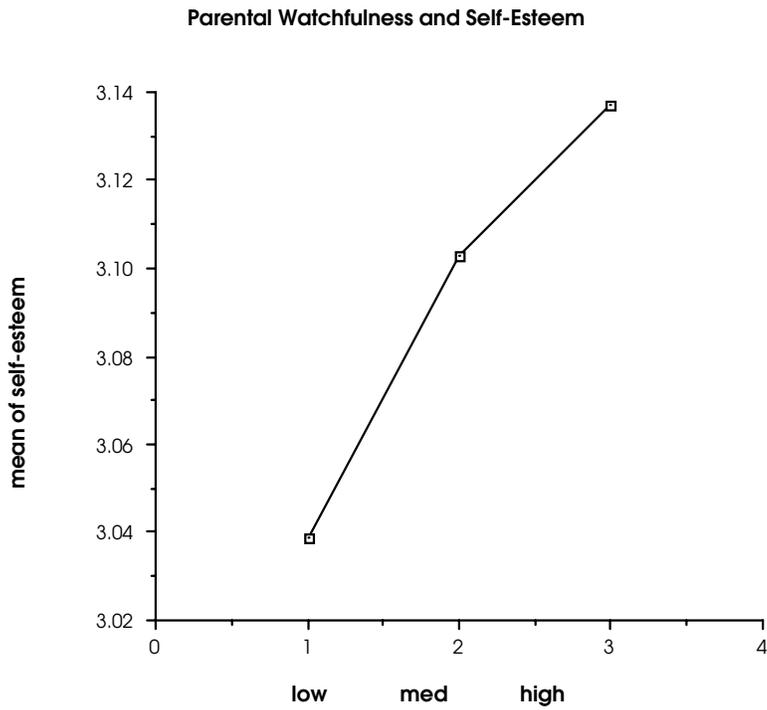


Figure 10. Parental Watchfulness And Adolescent Peer Relations.

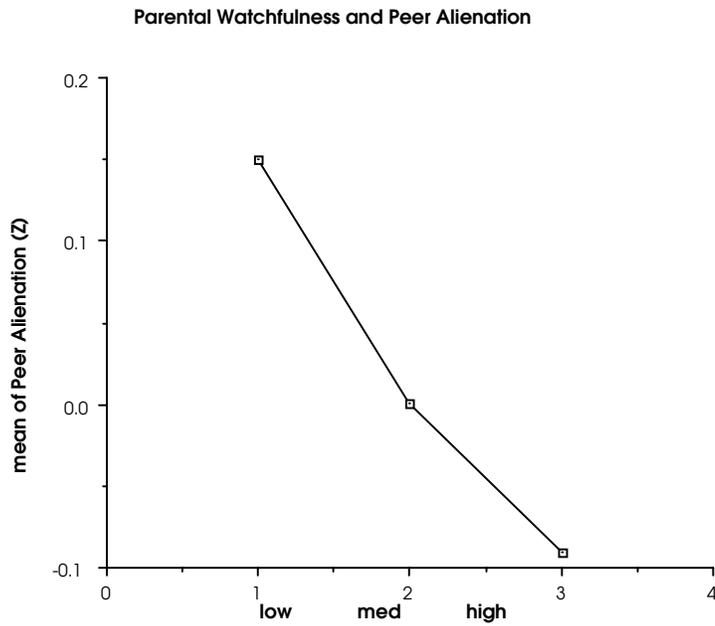


Figure 11. Parental Watchfulness and Adolescent Peer Pressure.

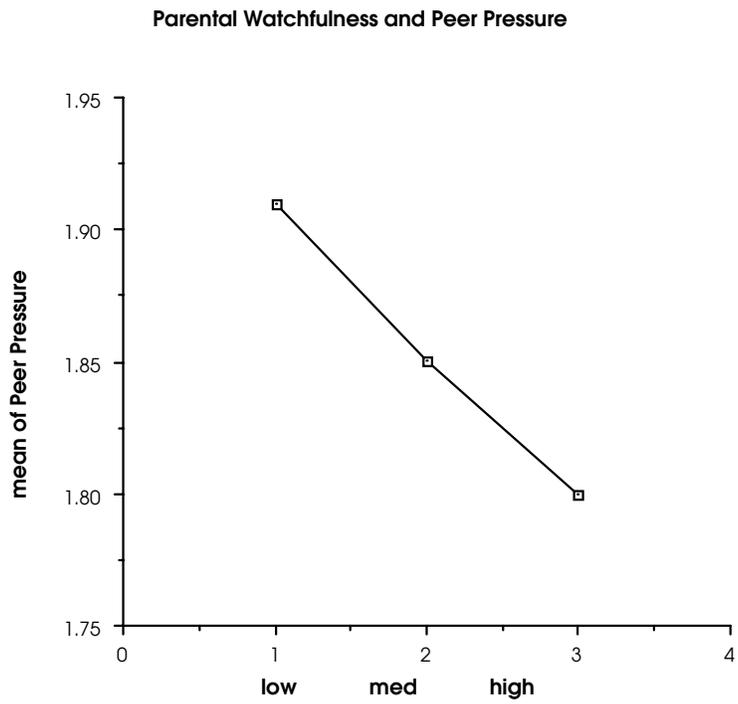


Figure 12. Parental Watchfulness and Adolescent Alcohol Use.

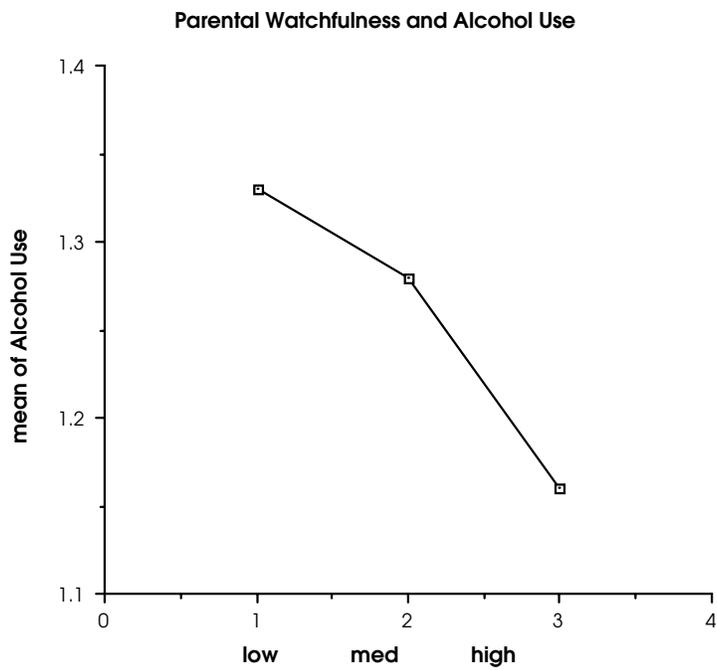


Figure 13. Parental Watchfulness and Adolescent Marijuana.

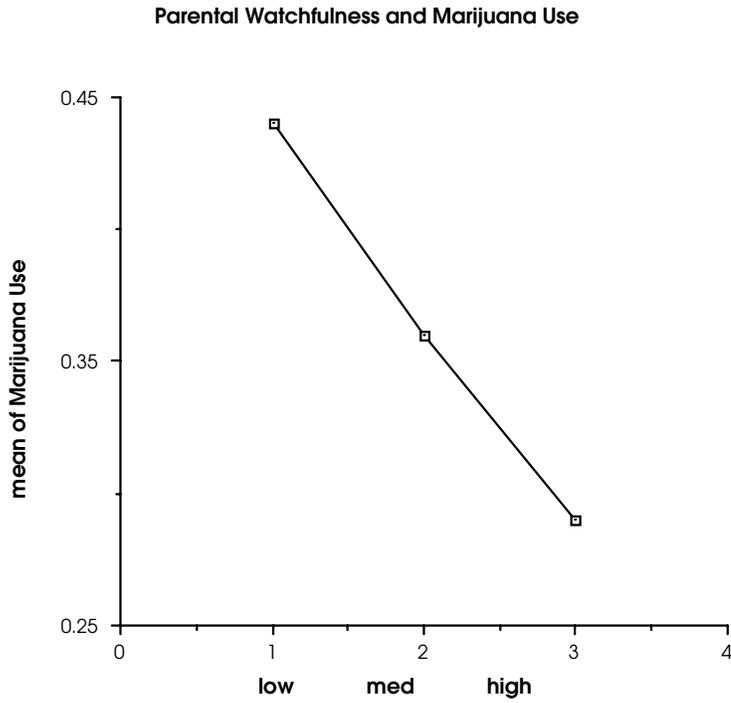


Figure 14. Parental Watchfulness and Adolescent Cocaine Use.

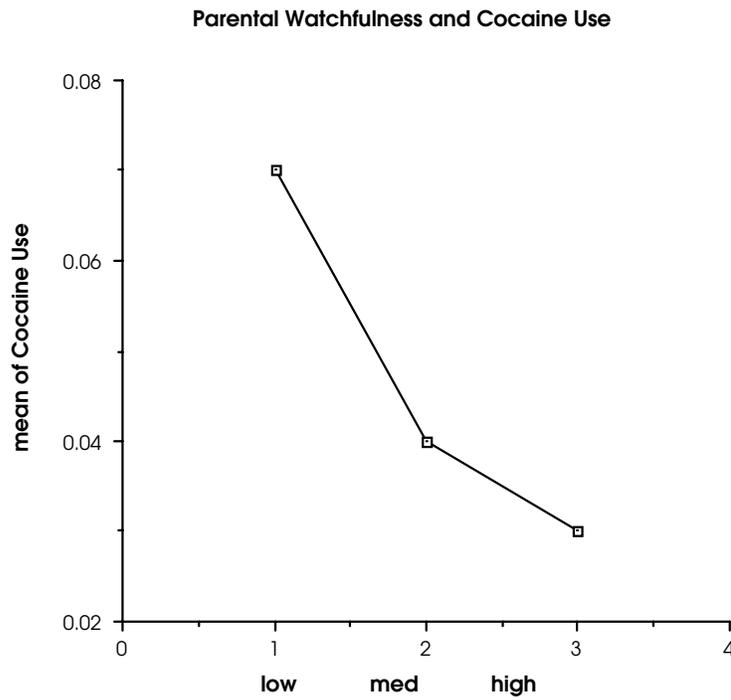


Figure 15. Parental Watchfulness and Adolescent Delinquency.

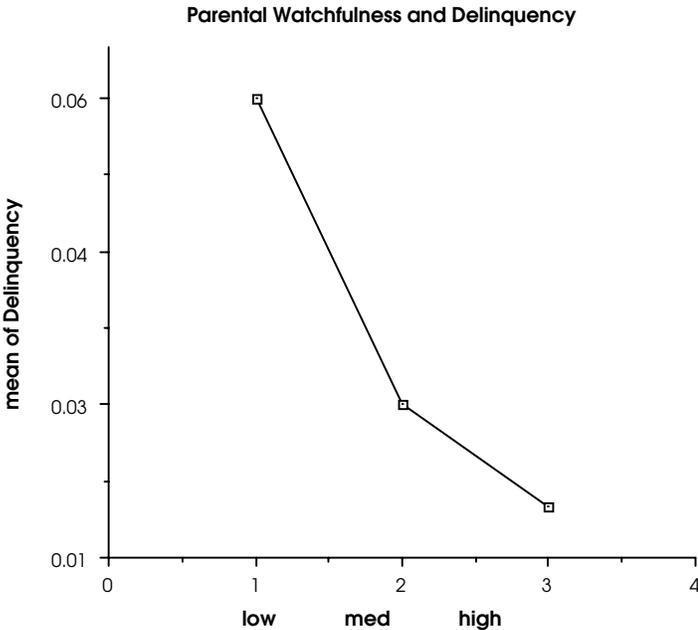


Figure 16. Parental Watchfulness and Misconduct.

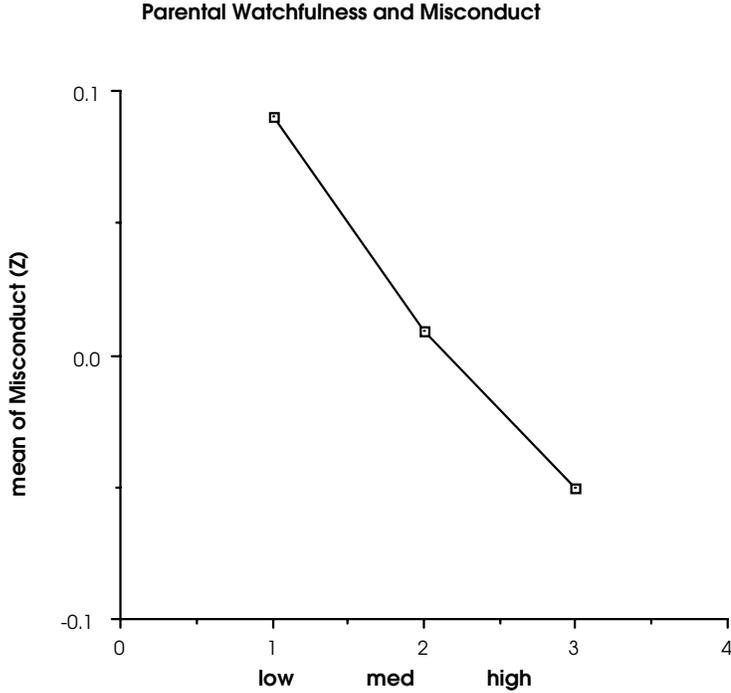


Figure 17. Parental Decidedness and Adolescent Self-Esteem.

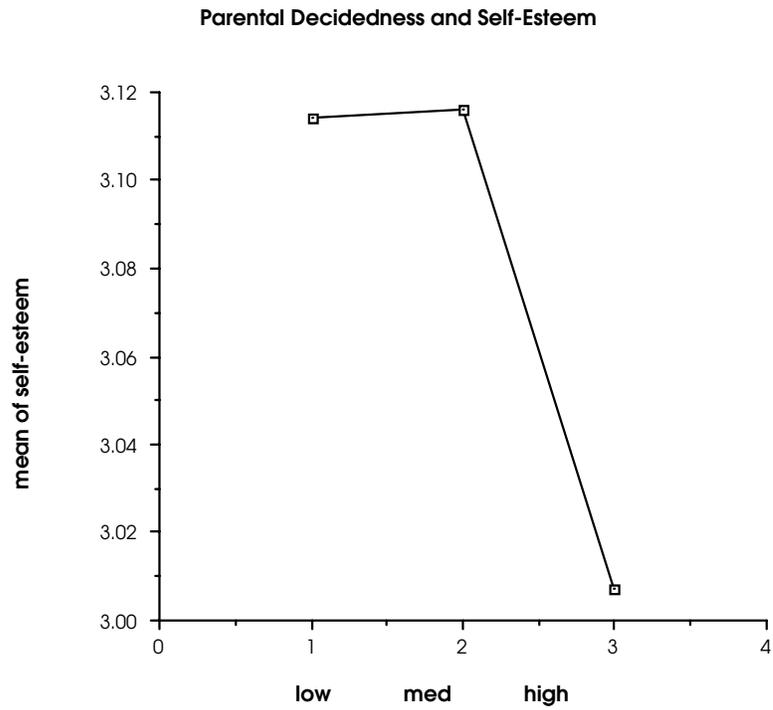


Figure 18. Parental Decidedness and Adolescent Peer Relations.

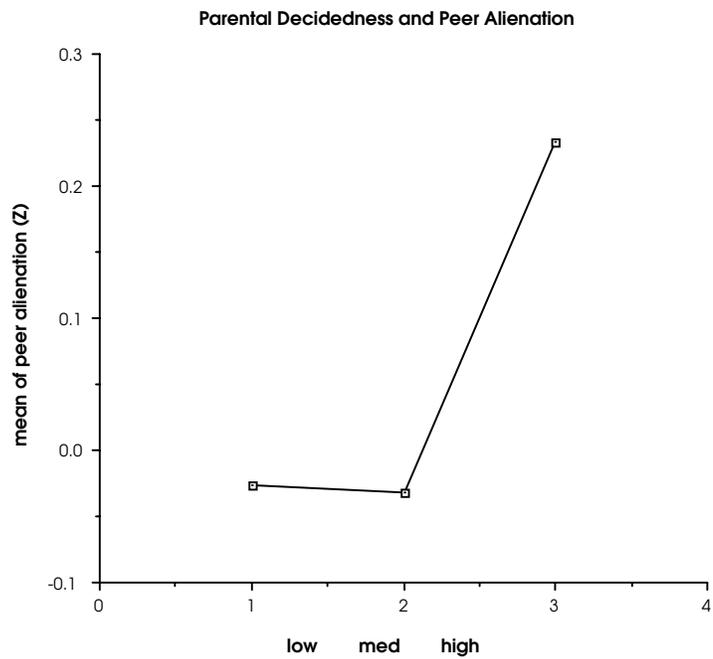


Figure 19. Parental Decidedness and Adolescent Peer Pressure.

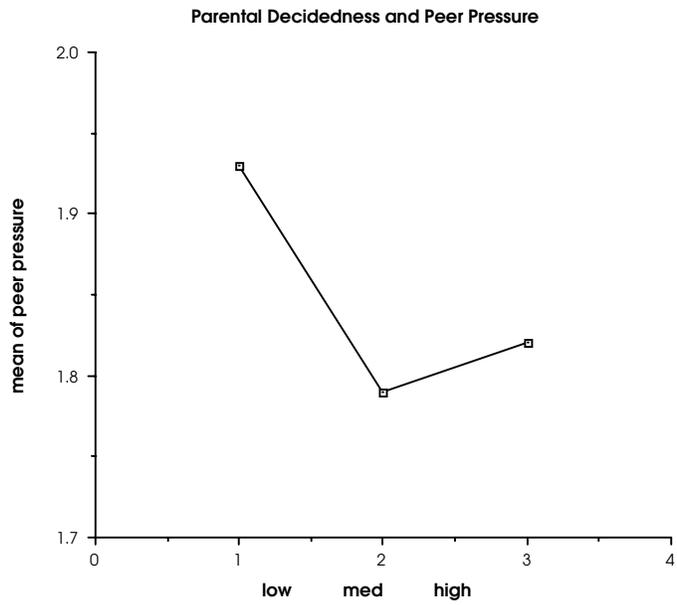


Figure 20. Parental Decidedness and Adolescent Alcohol Use.

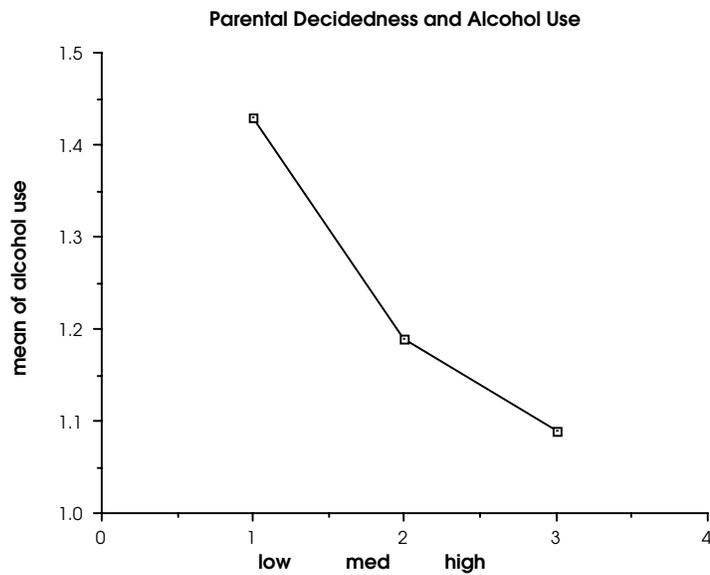


Figure 21. Parental Decidedness and Adolescent Marijuana.

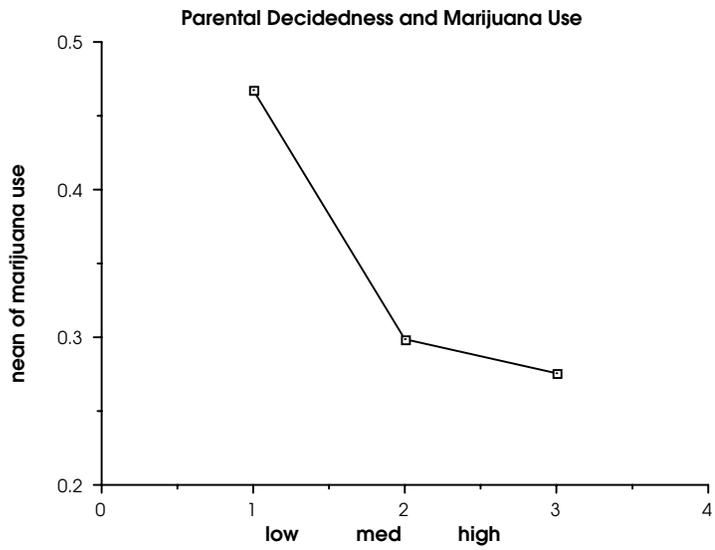


Figure 22. Parental Decidedness and Adolescent Cocaine Use.

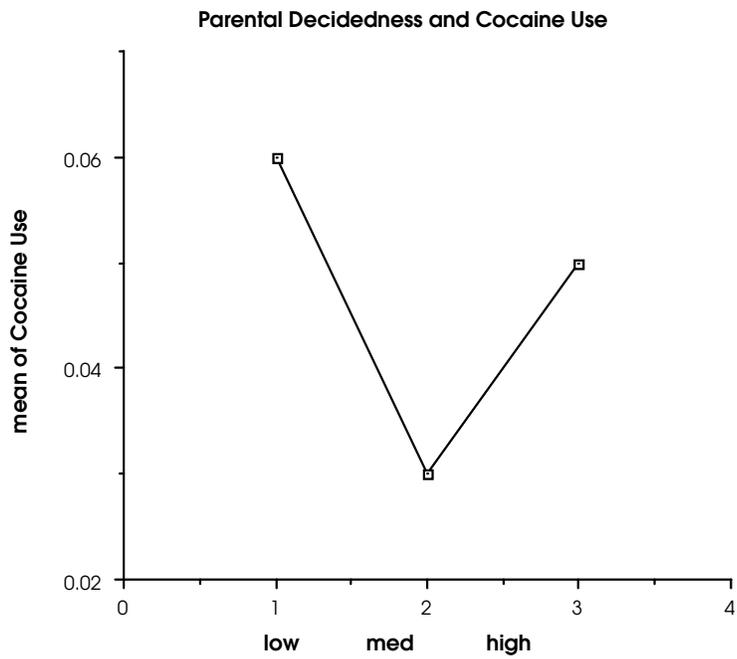


Figure 23. Parental Decidedness and Adolescent Delinquency.

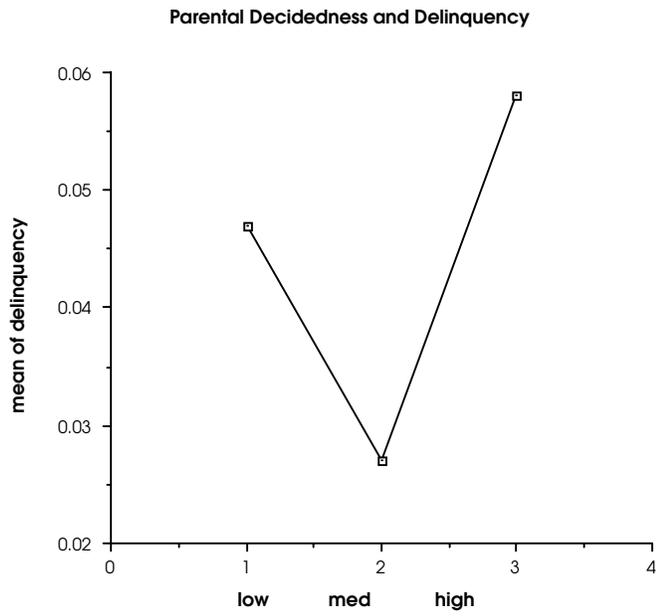
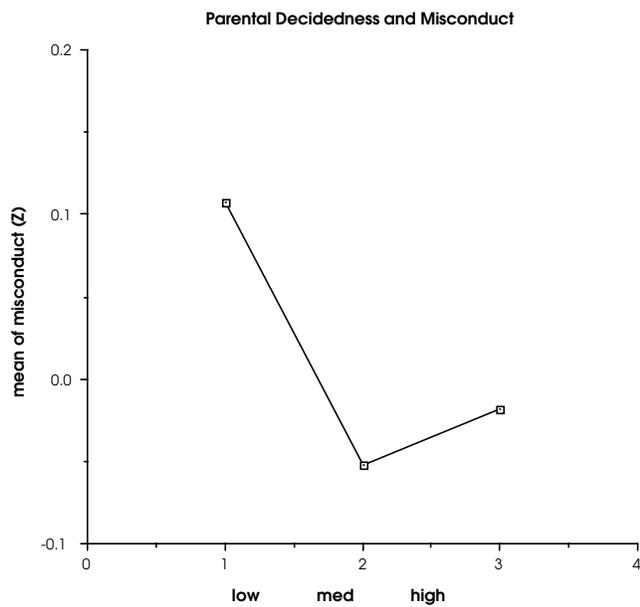


Figure 24. Parental Decidedness and Adolescent Misconduct.



### Analysis of Covariance: Three-Way and Two-Way

The main hypothesis for the study concerned the interrelationship among the parent variables and adolescent developmental outcomes and risk behaviors. Because of the curvilinear, bivariate relationships of parent and adolescent variables, the three-part split of these variables presented in the earlier figures was retained in these subsequent interactions and main effects tests using analysis of covariance controlling for background variables. The three parent variables, each split within these three levels, constituted the primary independent variables of these analyses. Background variables were entered as covariates for each test. Consequently a 3x3x3 analysis of variance was the overall scheme.

None of the three-way interactions were significant across the eight adolescent outcomes.

Three two-way interactions were significant. All three involved parental decidedness. These interactions included decide by support with adolescent misconduct, decide by support with adolescent delinquency, and decide by watchful with peer alienation.

Table 5 presents the cell means for parent support and decidedness with adolescent misconduct. The combination of low support and low parent decidedness was particularly deleterious for misconduct. Conversely, the combination of high support and high parent decidedness was particularly advantageous for lower misconduct. In addition, low support and high decidedness, as typified by authoritarian stereotype, was associated with higher misconduct.

The cell means for parent support and decidedness with adolescent delinquency appear in Table 6. The combination for low support and high parental decidedness resulted in the most delinquency. Adolescent delinquency was also high when low support was combined with low decidedness. The combination for high support and high parental decidedness was the most advantageous for adolescent delinquency.

Cell means for the interaction between parent decidedness and watchfulness with adolescent peer alienation is shown in Table 7. The worst parenting condition for adolescent peer alienation occurred with the combination of high parental decidedness and low watchfulness. The second highest amount of peer alienation occurred with the combination of high parental decidedness and moderate levels of watchfulness. The combination for high parent watchfulness with low or negotiated decidedness was best for positive peer relations.

Table 5

Adjusted Cell Means: Interaction between Parent Support and Decidedness with School Misconduct

	Parental Decidedness		
	low	medium	high
Parental Support			
low	0.27	0.10	0.15
medium	0.07	-0.07	-0.10
high	-0.04	-0.15	-0.25

\* These are adjusted cell means after controlling for background variables.  
 $p \leq .01$

Table 6

Adjusted Cell Means: Interaction between Parent Support and Decidedness with Formal Delinquency

	Parental Decidedness		
	low	medium	high
Parental Support			
low	0.07	0.04	0.10
medium	0.04	0.02	0.03
high	0.03	0.02	0.01

\* These are adjusted cell means after controlling for background variables.  
 $p \leq .01$

Table 7

Adjusted Cell Means: Interaction between Parent Watchfulness and Decidedness with Peer Alienation

	Parent Decidedness		
	low	medium	high
Parent Watchfulness			
low	0.07	0.16	0.56
medium	-0.04	-0.02	0.32
high	-0.11	-0.11	0.06

\* These are adjusted cell means after controlling for background variables.

$p \leq .01$

Analysis of Covariance: One-Way, Parent Support, Watchfulness, and Decidedness

Table 8 presents the means, standard deviations, F values, and contrasts for the three levels of parental support. Significant differences were found for all of the outcome variables with each level of parental support. As hypothesized in the introduction, high parental support was associated with positive outcomes for all of the adolescent measures. This was particularly evident with the adolescent developmental outcomes, self-esteem and peer alienation.

The means, standard deviations, F values, and contrasts for the three levels of parental watchfulness are shown in Table 9. Compared to moderate or low watchfulness, high parental watchfulness was related to greater self-esteem. Similar to support, watchfulness was most related to positive developmental outcomes for peers. Peer alienation was lowest when parents were highly watchful. Conversely, adolescents with the lowest parental watchfulness reported the greatest amount of peer alienation.

Table 10 presents the means, standard deviations, F values, and contrasts for the three levels of parental decidedness with each of the adolescent variables. As hypothesized, parental decidedness was associated with poorer developmental outcomes, but lower levels of adolescent risk behaviors. For instance, when adolescents made the decisions versus the parents, they reported higher self-esteem and less peer alienation. Less peer pressure, alcohol use, marijuana use, and misconduct, however, was associated with high parent decidedness.

Table 8

Adjusted Means and Standard Error of Adolescent Variables by Parent Support in Three Levels<sup>a</sup>

Variables		Support Three Levels			F	Contrasts
		Low (a)	Medium (b)	High (c)		
Self -Esteem	<u>M</u>	2.939	3.098	3.260	532.64*	c > b > a
	<u>SE</u>	0.007	0.007	0.007		
Peer Alienation	<u>M</u>	0.205	0.009	-0.223	642.86*	a > b > c
	<u>SE</u>	0.009	0.009	0.008		
Peer Pressure	<u>M</u>	1.913	1.839	1.772	64.67*	a > b > c
	<u>SE</u>	0.009	0.009	0.008		
Alcohol Use	<u>M</u>	1.401	1.248	1.139	97.15*	a > b > c
	<u>SE</u>	0.014	0.014	0.013		
Marijuana Use	<u>M</u>	0.494	0.328	0.236	135.31*	a > b > c
	<u>SE</u>	0.012	0.011	0.011		
Cocaine Use	<u>M</u>	0.063	0.033	0.023	27.75*	a > b,c
	<u>SE</u>	0.004	0.004	0.004		
Delinquency	<u>M</u>	0.052	0.029	0.024	19.05*	a > b,c
	<u>SE</u>	0.003	0.003	0.003		
Misconduct	<u>M</u>	0.149	-0.029	-0.117	225.19*	a > b > c
	<u>SE</u>	0.009	0.009	0.008		

\*p &lt; .01

<sup>a</sup>Controlled for background variables and the other two parent variables.

Table 9

Adjusted Means and Standard Error of Adolescent Variables by Parent Watchfulness in Three Levels<sup>a</sup>

Variables		Watchfulness Three Levels			F	Contrasts
		Low (a)	Medium (b)	High (c)		
Self -Esteem	<u>M</u>	3.075	3.102	3.134	11.51*	c > b, a
	<u>SE</u>	0.011	0.005	0.007		
Peer Alienation	<u>M</u>	0.094	-0.002	-0.071	53.01*	a > b > c
	<u>SE</u>	0.014	0.007	0.009		
Peer Pressure	<u>M</u>	1.844	1.836	1.836	0.13	
	<u>SE</u>	0.014	0.007	0.009		
Alcohol Use	<u>M</u>	1.244	1.275	1.229	3.93	
	<u>SE</u>	0.021	0.010	0.013		
Marijuana Use	<u>M</u>	0.376	0.351	0.322	3.66	
	<u>SE</u>	0.018	0.009	0.011		
Cocaine Use	<u>M</u>	0.050	0.039	0.035	1.95	
	<u>SE</u>	0.006	0.003	0.004		
Delinquency	<u>M</u>	0.041	0.032	0.034	1.05	
	<u>SE</u>	0.005	0.003	0.003		
Misconduct	<u>M</u>	-0.010	-0.006	-0.005	.045	
	<u>SE</u>	0.014	0.007	0.009		

\* $p < .01$

<sup>a</sup>Controlled for background variables and the other two parent variables.

Table 10

Adjusted Means and Standard Error of Adolescent Variables by Parent Decidedness in Three Levels<sup>a</sup>

Variables		Decidedness Three Levels			F	Contrasts
		Low (a)	Medium (b)	High (c)		
Self -Esteem	<u>M</u>	3.127	3.104	3.083	4.89*	a > c
	<u>SE</u>	0.007	0.005	0.014		
Peer Alienation	<u>M</u>	-0.073	-0.005	0.158	73.18*	c > b > a
	<u>SE</u>	0.009	0.006	0.017		
Peer Pressure	<u>M</u>	1.894	1.818	1.779	27.23*	a > b, c
	<u>SE</u>	0.009	0.006	0.018		
Alcohol Use	<u>M</u>	1.388	1.218	1.053	77.47*	a > b > c
	<u>SE</u>	0.014	0.010	0.027		
Marijuana Use	<u>M</u>	0.439	0.313	0.240	48.32*	a > b > c
	<u>SE</u>	0.012	0.008	0.023		
Cocaine Use	<u>M</u>	0.054	0.032	0.037	8.93*	a > b
	<u>SE</u>	0.004	0.003	0.008		
Delinquency	<u>M</u>	0.039	0.032	0.040	1.59	ns
	<u>SE</u>	0.004	0.002	0.007		
Misconduct	<u>M</u>	0.072	-0.031	-0.107	54.56*	a > b > c
	<u>SE</u>	0.010	0.007	0.018		

\* $p < .01$ <sup>a</sup> Controlled for background variables and the other two parent variables.

## CHAPTER 5. DISCUSSION

Parental support was hypothesized to be associated with adolescent's increased self-esteem, positive peer relationships and reduced risk behaviors. The findings from this study support the hypothesis for each of the adolescent variables. Additionally, the attachment theoretical framework effectively conceptualizes parental support. Attachment is linked to the formation of an internal model associated with sense of self and others. Parental support, as measured by items in this research, was most related to adolescent self-esteem and peer alienation, which is consistent with an attachment schema. Although parental support had a more modest relationship with the risk behaviors, these findings suggest that support is a protective factor for the risk behaviors. Adolescents in a highly supportive environment may have increased opportunity to safely explore the environment and reduce risk-taking behaviors.

An interaction effect was found between parental support and decidedness for two of the adolescent risk variables. Adolescent misconduct and delinquency were especially high when parental support was low and parent decision-making is either low or high. Adolescent delinquency and misconduct are associated with rebellion rather than exploration. The higher amount of delinquency and misconduct with low support and high/low decidedness may be adolescent rebellion of neglectful parenting (low support and decide) or highly authoritarian parenting (low support and over-controlling). High parental support combined with high decidedness was associated with the least amount of delinquency and misconduct. The interactions for these two adolescent outcomes provide partial support for Baumrind's (1967, 1991) parenting theory. According to Baumrind, a parenting style of high support and firm control is optimal throughout childhood and adolescence. This interaction is only found for the more rebellious risk behaviors.

The hypothesis that parental watchfulness is associated with a reduction in adolescent high-risk behaviors was not supported in this research. Instead, parental watchfulness, as measured in this research, was linked to self-esteem and peer alienation. This finding suggests that parental watchfulness may be an important aspect in maintaining a healthy balance in families between emotional connectedness and adolescent autonomy. For example, parental knowledge of their adolescent's daily activities and peer relationships indicates a bond and shared knowledge. Additionally, watchfulness implies caring and the adolescent feels valued. Consequently, the adolescent with watchful parents is likely to be more connected to the family. Although watchfulness indicates involvement in the adolescent's daily activities, it is not related to control. The close parent-adolescent relationship without high control facilitates more independent activities and a higher degree of confidence. This closeness without control contributes to a higher self-esteem and more positive peer relationships. Thus, watchfulness maintains the adolescent's connectedness within the family. Furthermore, the adolescent with watchful parents is likely to feel more value as an individual and experience greater autonomy. This in turn leads to more positive peer relations and self-esteem.

Watchfulness is conceptually representative of aspects of the parent-adolescent attachment relationship. Adolescents with watchful parents likely have greater autonomy, which contributes to increased exploration. Consequently, watchfulness was not related to adolescent risk-behaviors. Instead watchfulness was related to aspects of attachment involving sense of self and emotional connectedness to others.

Parental watchfulness and parental decidedness interacted in influencing peer alienation. Watchfulness alone was associated with less peer alienation and parental decidedness was associated with greater peer alienation. However, when parents were highly involved in decision-making and low or moderately watchful, adolescents experienced the most alienation from peers.

The findings for both parent support and watchfulness suggest that an attachment lens is appropriate and provides insight into personality development during adolescence. Watchfulness is associated with internal processes of self-concept and relating to others rather than a mechanism for controlling behavior. Support is also most related to higher self-esteem and more positive peer relations. Self-esteem and peer competence are important paths to identity achievement.

In addition to the attachment lens, a systems model is a useful framework for understanding these variables. Both support and watchfulness, aspects of family cohesion, maintain family bonds and emotional connectedness. Although family theorists disagree regarding optimal levels of family cohesion, the Circumplex Model (Olson, Sprenkle, & Russell, 1979) a widely applied assessment of family functioning indicates moderate levels are optimal. According to this model, high family cohesion is viewed as enmeshment. However, research by Barber and Buehler, (1996) indicate that cohesion and enmeshment are actually independent of one another. The present findings support the independence of these two constructs. Moreover, the present research counters the view that moderate cohesiveness is optimal and instead indicates that high amounts of support and watchfulness are related to the most positive outcomes for adolescent self-esteem and peer relations. Thus, the notion of “too supportive” parenting was not found in this study. Instead, support appears to function like a secure attachment base for the adolescent. Similarly, watchfulness is related to personal/interpersonal processes of attachment and may facilitate a balance in families between emotional connectedness and autonomy.

Results from the present research additionally support the hypothesis that high parental decidedness is associated with lower adolescent risk behaviors along with lower self-esteem and peer relationships. These findings indicate that decidedness, representative of family hierarchy, is related to adolescent risk outcomes, but that the relationship is non-linear. Instead, a balance in hierarchy is associated with overall positive outcomes for adolescents and as a buffer against negative outcomes.

For two of the outcomes, high parent decidedness was associated with negative outcomes. Specifically, when parents have more influence on adolescent decisions, the adolescent has lower self-esteem and greater susceptibility to peer alienation. Practitioners whose work help families with high parent hierarchy in the decisions making process may help set the stage for the adolescent’s more positive sense of self and better connection with peers.

The lack of some parental involvement in adolescent decision making, however, is associated with more problems. Specifically, adolescents whose parents are non-involved in their decisions have higher scores on alcohol abuse, marijuana use, misbehavior overall, and susceptibility to peer pressure. Consequently, practitioners who are alert to the potential of lack of parental involvement in adolescents decisions can help those adolescents avoid risks by promoting more involvement of parents in decision making. The findings here dispel the approach of allowing adolescents full autonomy in decisions, and instead suggest of a model

of collaborative dialogue between parents and adolescents regarding the decisions the adolescent makes.

The clearest example of curvilinearity and decidedness is with adolescent delinquency. Specifically, high parental decidedness and low parental involvement in the adolescent's decisions are both associated with greater delinquency. When parents have more influence on adolescent decisions such as who to date, how to spend time and money, etc., the adolescent may react to the authoritarian approach by 'rebellious' with delinquent behavior. For the practitioner, then it is important to assess the degree of hierarchy as reflected in parent deciding on adolescent's issues. For families with little or no parental involvement in the decision making, the practitioner can identify ways that parent involvement can enhance the structure for the adolescent. Indirectly, too, the involvement of parents in decision making can help promote more support.

Although parental decidedness had curvilinear associations with adolescent's problems, parental support had a highly linear relationship. Higher parental support was associated with more positive outcomes for adolescents. Likewise, parental watchfulness was linearly related to adolescent self-esteem and peer competency. For the practitioner, then, promoting supportive and watchful relationships within families with adolescents can be beneficial across the board.

Recent research in family therapy found beneficial effects from an attachment-focused intervention. Diamond and Liddle (1999) reported more positive parent-adolescent interactions in therapy following support-related intervention, which focused on features of the attachment relationship. Similarly, Mackey, (1996) developed a model to integrate aspects of the attachment relationship into family therapy.

While parent support is not significantly different for boys than girls in the present study, both parent watchfulness and decidedness differed by gender. Parents are more watchful and more involved in decision-making with girls. These findings support a patriarchal interpretation of parental attitudes regarding their daughters (Renzetti & Curran, 1998). However, the dynamics of watchfulness when conceptualized as an attachment relationship become more complex. Greater watchfulness of daughters may reflect more about attachment differences rather than patriarchal differences. Previous research found that girls form stronger attachments to their parents than do boys (Benson, Harris, & Rogers, 1992). Thus, watchfulness may be more reflective of attachment processes while differences in decidedness concur with a patriarchal interpretation.

Current research indicates that boys are struggling emotionally and feel alienated from families and peers. Pollack (1998) asserts that boys are pressured in early childhood and again in adolescence to disconnect from their families and conform to a rigid stereotype. He attributes numerous educational, emotional and behavioral problems experienced by boys to this gender constraint placed on males in contemporary culture. The author recommends building and maintaining strong attachment bonds between parents and sons to overcome these constraints. The present study provides partial support for this research. Parents were less watchful and less involved in decision-making with boys than with girls.

Several limitations of this research are noted. First, the measures were constructed from data collected in 1990 and 1992. In addition, the adolescents were in the tenth grade in 1990, limiting these findings to a tenth grade population.

## CHAPTER 6. CONCLUSION

In summary, conclusions from this research have implications for theory and practice. For practice, the findings suggest refinement in contemporary parent education and clinical work with families. For theory, the understanding of specific linkages between these parenting constructs and adolescent outcomes is advanced in this research. These linkages have implication for extensions and refinement of attachment and family systems theories.

From an attachment theory perspective, the findings suggest that parental support and parental watchfulness operate as somewhat independent channels in the development of self-esteem and peer relations. Though only slightly related to one another, support and watchfulness share larger effects on self-esteem and peer relations than on conduct problems.

In contrast to these parenting constructs, the construct of parental control or decidedness appears complex in effect. Parental decidedness is curvilinear in its relationship to the dependent variables. Additionally, this variable interacts in at least three ways with other parenting variables. Moreover, parental decidedness presents a different direction of influence depending on the adolescent outcome. The direction of influence of decidedness is negative for self-esteem and peer relations and positive for adolescent risk reduction. These findings additionally clarify some interpretations of hierarchy process in systems theory. Parental decidedness was related to less delinquency and misconduct when combined with support. Furthermore, decidedness, even when controlling for support, was related to less substance abuse, however, the relationship was less salutary for self-esteem and peer relations. These findings add another dimension to the systems theory notions of hierarchy, namely the importance of support. Hierarchy without support was associated with more rebellion.

The present findings confirm Baumrind's (1991) hypothesis for some outcomes but not others. Baumrind contends that parental support with firm control is the most successful parenting style for promoting adolescent competence. In the present study, Baumrind's hypotheses were confirmed for all of the risk behaviors. Findings for the relationship between control and adolescent self-esteem and peer relations, however, counter Baumrind's hypothesis. Only support was related to favorable outcomes for self-esteem and peer relations. Moreover, control was related to less favorable self-esteem and peer relations.

In addition to theoretical application, these overall findings have several important implications for practice. First, the results from this research suggest that parent education programs specifically designed to foster support and watchful behavior and to provide assistance with helping families negotiate decisions would be beneficial to families. Furthermore, recasting watchfulness in the parent adolescent relationship as caring behavior rather than controlling may contribute favorably to adolescent self-esteem and peer relations. Additionally, the present findings indicate that parental hierarchy reduces risk behaviors.

In other words, parental support such as fairness, understanding, pride, and trust, facilitates positive development and helps teens avoid risk. Furthermore, when parents know what their teens are doing, adolescent self-esteem and peer relations are enhanced. Lastly, parents that are highly involved in decision making may hinder development of self-esteem and positive peer relationships, but reduce risk behaviors.

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## Appendix A

### Participant Attrition between Initial Year (1990) and Follow-up (1992) (N = 1005)

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Reason for Attrition	
Non-Respondent	521
Unlocatable	256
Refused	126
Ineligible	4
Out of Country	77
Deceased	21
Total Attrition Between 1990 and 1992	1005

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Note. The sample for the study included 16,749 students that participated in the study as tenth graders in 1990 and also participated in the follow-up in 1992. An additional 1,005 students also participated in 1990, but did not participate in 1992. The reasons for dropout are indicated in the table.

## Appendix B

### Sample Selection and Measures Using NELS Variable Names and Values

This information is presented for readers interested in verifying or replicating the sample section, measure construction, or analyses presented in this dissertation. The variable names and values in this appendix match precisely the names and values in the NELS Electronic Codebook.

#### Sample Selection Criteria

Select if

F2univ2c = 0 (first follow-up status freshened in 1990, n = 264)

OR 18,440

F2univ2c = 1 (first follow-up status in school, in grade in 1990, n = 18,176)

AND 16,749

F1stat = 0 (status of sample member in 1990, participated, n = 19,394)

AND 18,116

F2stat = 0 (status of sample member in 1992, participated, n = 19,220)

Scale/Item	NELS Variable Name	Anchors (range)
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#### Background Variables

Composite Gender	FISEX	male(1)–female(2)
Composite Race	FIRACE	See Table 1
Socio-economic status composite	FISES	-3.290 – 2.762
Standardized composite reading, math comprehension	FI2XCOMP	30.27 – 71.82

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#### Parent Variables

Perceived Parental Support		false (1) - true (6)
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R's parents treat R fairly	F1S63A	
R gets along well with his/her parents	F1S63I	
R's parents understand him/her	F1S63U	
Parents trust R to do what they expect	F1S108A	
R will be a source of pride to parents	F1S108D	
Parents disappointed with what R does	F1S63M*	

Parental Decidedness		student (1) – parent (5)
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Who decides friends R spends time with	F1S104B	
Who decides which classes R will take	F1S104C	
Who decides if R can have a job	F1S104D	
Who decides how R will spend his money	F1S104F	
Who decides whether R can date	F1S104G	
Who decides if R goes out for school sport	F1S104H	
Who decides if R should be in school activities	F1S104I	
Who decides if R should go to college	F1S104J	

Parental Watchfulness	don't know (1) – a lot (5)
Parents try to find out who friends are	F1S102A
Parents try to find out where R goes at night	F1S102B
Parents try to find out how R spends money	F1S102C
Parents try to find out what R does with free time	F1S102D
Parents try to find out where R is after school	F1S102E

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Adolescent Variables

Peer Alienation	
R does not get along well with girls	F1S63O false (1) - true (6)
R does not get along well with boys	F1S63P false (1) - true (6)
Can't make friends with members of own sex	F1S63R false (1) – true(6)
R not very popular with opposite sex	F1S63T false (1) - true (6)
R makes friends easily with girls	F1S63K* false (1) - true (6)
R makes friends easily with boys	F1S63L* false (1) - true (6)
R felt more alone in high school	F1S65E* agree(1)disagree(4)
Think of R as not fitting in any group	F1S67H*agree(1)-disagree(4)
Peer Pressure	not imp.(1) –very imp. (3)
Among friends how important to party	F2S68M
How important to have sexual relations	F2S68N
Among friends how important to drink	F2S68P
Self-Esteem	agree(1)-disagree(4)
When getting ahead somebody/thing stops R	F2S66F
R feels plans hardly ever work out	F2S66G
R feels useless at times	F2S66I
At times R thinks she/he is no good at all	F2S66J
R does not have much to be proud of	F2S66L
	disagree(1)- agree(4)
R feels good about him/herself	F2S66A <sup>a</sup>
R feels s/he is a person of worth	F2S66D <sup>a</sup>
R able to do things as well as others	F2S66E <sup>a</sup>
On the whole R is satisfied with self	F2S66H <sup>a</sup>
Alcohol Use	zero (0) –> twenty (3)
In lifetime # of times had alcohol to drink	F2S81A
In last 12 months # of times R drank alcohol	F2S81B
In last 30 days # of times R drank alcohol	F2S81C
# of times R had 5 drinks or more in a row	F2S82
Marijuana Use	zero (0) –> twenty (3)
In lifetime # of times R used marijuana	F2S83A
In last 12 months # of times R used marijuana	F2S83B

In last 30 days # of times R used marijuana

F2S83C

Cocaine Use		zero (0) – > twenty (3)
In lifetime # of times taken cocaine	F2S84A	
In last 12 months # of times taken cocaine	F2S84B	
In last 30 days # of times taken cocaine	F2S84C	
Delinquency		never (0) - > fifteen (5)
How many times R suspended from school	F2S9F	
R transferred for disciplinary reasons	F2S9G	
How many times R was arrested	F2S9H	
# times R spent time in juvenile center	F2S9I	
Misconduct		
How many times was R late for school	F2S9A	never (0) -> 15 (5)
How many times did R cut classes	F2S9B	never (0) -> 15 (5)
How many times did R miss school	F2S9C	never (0) -> 15 (5)
How many times R got in trouble	F2S9D	never (0) -> 15 (5)
How many times put on in-school suspension	F2S9E	never (0) -> 15 (5)
At school # of times under influence of alcohol	F2S85A	zero (0) – > 20 (3)
At school # of times under influence marijuana	F2S85B	zero (0) – > 20 (3)

\* item has been reverse coded

<sup>a</sup> original scale was agree(1) to disagree(4), but all of the items were reverse scored.  
Consequently high scores reflect higher levels of the construct label for the scale.

Appendix C

Study Variables: Means and Standard Deviation by Race

Variables		Race					F
		Asian	Hispanic	Black	White	Am Indian	
Background							
SES	<u>M</u>	0.23	-0.52	-0.35	0.19	-0.31	495.04*
	<u>SD</u>	0.90	0.78	0.79	0.75	0.69	
Read/Math	<u>M</u>	54.41	46.54	45.19	53.09	45.07	413.99*
	<u>SD</u>	10.18	8.78	8.91	9.66	8.41	
Parent							
Support	<u>M</u>	4.62	4.73	4.76	4.74	4.70	3.52*
	<u>SD</u>	0.99	1.05	1.00	1.01	0.98	
Watchful	<u>M</u>	3.73	3.83	3.80	3.86	3.54	10.45*
	<u>SD</u>	0.83	0.85	0.91	0.85	1.06	
Decide	<u>M</u>	1.96	1.93	1.96	1.84	1.71	17.83*
	<u>SD</u>	0.78	0.78	0.78	0.71	0.67	
Student							
Self-Esteem	<u>M</u>	3.05	3.09	3.18	3.10	3.07	10.99*
	<u>SD</u>	0.49	0.47	0.47	0.47	0.46	
Peer Alienation	<u>M</u>	0.05	0.03	0.12	-0.03	0.08	21.89*
	<u>SD</u>	0.63	0.63	0.70	0.61	0.67	
Peer Pressure	<u>M</u>	1.65	1.84	1.75	1.87	1.86	37.02*
	<u>SD</u>	0.56	0.58	0.56	0.60	0.60	
Alcohol Use	<u>M</u>	0.87	1.22	0.86	1.33	1.21	125.25*
	<u>SD</u>	0.76	0.88	0.72	0.87	0.91	
Marijuana Use	<u>M</u>	0.19	0.35	0.18	0.38	0.53	34.04*
	<u>SD</u>	0.49	0.66	0.48	0.74	0.78	
Cocaine Use	<u>M</u>	0.03	0.07	0.01	0.04	0.05	7.28*
	<u>SD</u>	0.21	0.31	0.12	0.25	0.27	
Delinquency	<u>M</u>	0.02	0.04	0.05	0.04	0.08	4.16*
	<u>SD</u>	0.13	0.23	0.20	0.24	0.35	
Misconduct	<u>M</u>	-0.08	0.09	-0.03	0.00	0.09	14.41*
	<u>SD</u>	0.54	0.64	0.58	0.66	0.64	

\*p < .01

Appendix D

Background Variables: SES and Reading and Math Comprehension

Means and Standard Deviation by Parent Support in Three Groups

Independent	Parent Support Three Groups			F	
	Low Support	Med Support	High Support		
Background Variables					
SES	<u>M</u>	-0.005	0.097	0.109	93.97*
	<u>SD</u>	0.787	0.809	0.814	
Read/Math	<u>M</u>	49.95	52.56	52.73	123.02*
	<u>SD</u>	9.81	9.99	9.78	

\*p < .01

Background Variables: SES and Reading and Math Comprehension

Means and Standard Deviation by Parent Watchful in Three Groups

Independent	Parent Watchful Three Groups			F	
	Not Watchful	Med Watchful	High Watchful		
Background Variables					
SES	<u>M</u>	-0.142	0.095	0.139	30.56*
	<u>SD</u>	0.791	0.805	0.794	
Read/Math	<u>M</u>	48.82	52.27	52.76	124.66*
	<u>SD</u>	10.16	9.87	9.65	

\*p < .0

Background Variables:

Means and Standard Deviation by Parent Decide in Three Groups

Independent	Parent Decidedness Three Groups			F	
	Adolescent	Negotiated	Parent		
Background Variables					
SES	<u>M</u>	0.02	0.13	-0.09	227.42*
	<u>SD</u>	0.80	0.80	0.82	
Read/Math	<u>M</u>	51.45	52.98	46.84	62.77*
	<u>SD</u>	9.91	9.68	9.90	

\*p < .01

## Appendix E

### Parental Support, Watchful, and Decide Crosstabs with Background Gender and Race

	Support Three Levels		
	Low Support	Medium Support	High Support
<b>Gender</b>			
Male	31.0%	33.9%	35.1%
Female	32.8%	31.2%	36.0%
<b>Race</b>			
Asian	37.4%	33.4%	29.2%
Hispanic	32.6%	30.3%	37.1%
Black	33.3%	29.6%	37.0%
White	31.1%	33.2%	35.7%
Am Indian	36.2%	28.9%	34.9%

Gender  $X^2$  (2,  $N = 15,629$ ) = 13.539,  $p < .001$

Race  $X^2$  (8,  $N = 15,554$ ) = 36.548,  $p < .001$

	Watchfulness Three Levels		
	Not Watchful	Moderate Watchful	High Watchful
<b>Gender</b>			
Male	16.7%	56.5%	26.8%
Female	11.2%	49.5%	39.3%
<b>Race</b>			
Asian	15.2%	58.2%	26.6%
Hispanic	13.9%	52.8%	33.2%
Black	15.3%	51.5%	33.2%
White	13.4%	52.6%	34.0%
Am Indian	26.8%	47.1%	26.1%

Gender  $X^2$  (2,  $N = 15,429$ ) = 297.598,  $p < .001$

Race  $X^2$  (8,  $N = 15,358$ ) = 46.979,  $p < .001$

	Decidedness Three Levels		
	Adolescent Decide	Negotiated	Parent Decide
<b>Gender</b>			
Male	38.3 %	53.0 %	8.7 %
Female	23.8 %	67.4 %	8.7 %
<b>Race</b>			
Asian	26.6 %	62.1 %	11.3 %
Hispanic	30.4 %	58.3 %	11.3 %
Black	27.1 %	60.5 %	12.4 %
White	31.5 %	60.8 %	7.6 %
Am Indian	43.0 %	49.6 %	7.4 %

Gender  $X^2$  (2,  $N = 14,848$ ) = 381.942,  $p < .001$

Race  $X^2$  (8,  $N = 14,782$ ) = 79.378,  $p < .001$

## Appendix F

### Standardized Betas in Regression Analysis

The analyses conducted in this report are based primarily on the tripartite parent groups. The presentation decision was based on curvilinearity and interactions with the decidedness variable. (See page 35) This information is presented for readers interested in results of the regression analysis.

Variable	Adolescent							
	Self-Esteem	Peer Alienation	Peer Pressure	Alcohol Use	Marijuana Use	Cocaine Use	Delinquency	Misconduct
Parent								
Support	.281*	-.262*	-.102*	-.128*	-.169*	-.084*	-.053*	-.185
Watchfulness	.045*	-.106*	.000	-.012	-.021	-.018	-.014	-.003*
Decide - Student	.031*	-.061*	.056*	.089*	.079*	.039*	.012	.074*
Decide - Parent	.006	.069*	-.018	-.053*	-.033*	.006	.013	-.034*

\*  $p < .01$

## VITAE

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### **Education**

Ph.D. in Family and Child Development, Virginia Polytechnic Institute and State University

M.A. in Psychology, Hollins University, Roanoke VA

B.A. in Psychology, Hollins University, Roanoke, VA  
Class salutatorian with honors in Psychology

### **Awards and Honors**

Full Graduate Assistantship, Virginia Polytechnic Institute & State University, 1997-2000

Full Graduate Assistantship, Psychology Department, Hollins University, 1995-96  
F.J. McGuigan Psychology Award, 1995, 1996; Phi Beta Kappa, Sigma Xi, Psi Chi

### **Teaching Experience**

- August 1999 – Present Graduate Assistant, Office of the Associate Dean for Academic Affairs, College of Human Resources and Education, Virginia Polytechnic Institute and State University, Blacksburg, VA.  
Responsible for organizing and managing the Orientation and Perspectives course with an enrollment of 250 students.  
Responsibilities include class preparation, select presentations, developing assignments, advising, and managing grades.
- August 1997 – May 1999 Course Instructor, Human Sexuality, Graduate Teaching Assistant, Virginia Polytechnic Institute and State University, Blacksburg, VA.  
A developmental approach to human sexuality (3 credits)  
Sole instructor with enrollment of 300 students
- December 1996 - present Course Instructor, Developmental Psychology, Adjunct Faculty, College of Health Sciences, Roanoke, VA.  
Four credit course (60 lecture hours) overview on the basic principles of psychology and human growth & development.  
Average enrollment of 35 students
- August 1998 Teen Outreach Area Conference, Family Service of Roanoke Valley, Roanoke, VA.  
Director: Cheri Hartman, Ph.D.  
Planned and co-facilitated a workshop for educators

Topic: Teaching sexuality to adolescents

- June 1998  
Invited guest lecturer, Intro to DSM-IV, graduate course in counseling, Virginia Polytechnic Institute and State University, Blacksburg, VA.  
Instructor: Tom Hohenshil, Ph.D.  
Topic: Sexual Disorders
- Fall, 1996  
Invited guest lecturer, Psychology, College of Health Sciences.  
Instructor: Pam Melton, Ph.D.  
Presentations on suicide and anxiety (3 hours each)
- 1995, 1996  
Teaching Assistant, Intro Psychology, Hollins University  
Instructor: R.K. Flory, Ph.D.  
Test planning, grading, assisting students, and presentation of select material.
- 1995, 1996  
Teaching Assistant: Seminar in Practical Research Skills  
Instructor: R.K. Flory, Ph.D.  
Instruction in the use of various types of research equipment including biofeedback. Trained students in the use of computer spreadsheet, graphics and statistical programs, and research literature databases.
- Spring, 1995  
Teaching Assistant, Intro Psychology, Hollins University  
Instructor: Michael Chiglinsky, Ph.D.  
Test planning, grading, assisting students, and lecture.
- Spring, 1995  
Independent Study Supervisor, Hollins University  
Student Topic: Research in phototherapy  
Current literature readings on SAD, chronic pain and phototherapy; instruction in the use of various self report inventories, literature search, & professional report writing

### **Workshops**

January, 2000 Blackboard Courseinfo training workshop - a program for delivering course materials over the Web

October, 1999 Advanced studies seminar on the use of the National Educational Longitudinal Study of 1988 Database sponsored by the U. S. Department of Education, National Center for Education Statistics

### **Clinical Work Experience**

- Sept. 1996 - May 1998      School Social Worker, Teen Outreach Program  
Family Service of Roanoke Valley  
Supervisor: Cheri Hartman, Ph.D.  
Individual assessment and referrals for appropriate educational and social services for students; Psychoeducational components include; goal-setting, anger management, problem solving skills.
- 1996 - 1997                      Technician, Chronic Pain Clinic, Roanoke, VA  
Supervisor: Alan Katz, Ph.D., Appalachian Counseling Center,  
Evaluating TENS therapy with chronic pain patients and teaching patients various techniques for pain and stress management.
- Jan. 1995 - Feb 1996          Student Research/Therapist, Hollins University  
Supervisor: Randall K. Flory, Ph.D.  
Therapy with chronic pain patients; administering and evaluating effects of light therapy on pain, mood and sleep.
- Jan 1995 - Aug 1996          Psychology Technician, Appalachian Counseling Center  
Supervisor: Michael Chiglinsky, Ph.D.  
Psychological testing and assessment of children and adolescents.
- Jan 1993 - Aug 1993          Internship 1993 and part-time rehab therapist  
Hollins Rehabilitation Research Institute, Roanoke, VA  
Supervisor: William James, LPC, CRP  
Therapeutic work with head-injured patients; cognitive training, behavior therapy, orientation training, skills training, group sessions, data collection and report writing.

### **Professional Organizations**

- National Council on Family Relations - student member
- Society for Research on Adolescence - student member
- American Counseling Association - student member
- Virginia Psychological Association - student member
- Sigma Xi - associate member

### **Publications**

- Parker, J. S., Everhart, D. E., Flory, R. K. & Denbow, D. M. (1996).  
Neurochemical, physiological, and behavioral effects of bright light therapy on a cortically blind patient. The International Journal of Neuroscience, 88, 273-282.

Katz, A. M., Chiglinsky, M. & Parker, J. S. (1997). Behavioral methods of stress control. In E. A. Workman and John Hubbard (Eds.), Handbook of Stress Medicine: An Organ Systems Approach. Boca Raton, FL: CRC Press LLC, Inc.

### **Manuscripts Submitted**

Parker, J. S., Flory, R. K., Everhart, D. E. & Denbow, D. M. The neurochemical, affective and behavioral effects of light therapy on bulimia nervosa. Psychiatry Research.

Flory, R. K. & Parker, J. S. The effects of light treatment on pain, affect, and sleep in chronic pain subjects. Journal of Pain.

### **Presentations**

Parker, J. S., Benson, M. J., Habben, C. M., & Galway, M. A. (1999, November). Guiding Parents on Their Teen's Sexuality, Pregnancy, and Parenthood: Promising Practices from Research. Paper presentation, National Council on Family Relations, Irvine, CA.

Parker, J. S., Everhart, D. E., Flory, R. K. & Denbow, D. M. (1996, April). Neurochemical, physiological, and behavioral effects of bright light therapy on a cortically blind patient. Poster presentation, Virginia Psychological Association, Williamsburg, VA

Parker, J. S., Everhart, D. E., Flory, R. K. & Denbow, D. M. (1996, April). Neurochemical and behavioral effects of bright light on seasonal depressive symptoms: A case study. Poster presentation, Virginia Psychological Association, Williamsburg, VA

Flory, R. K. & Parker, J. S. (1995, April). The Effects of Light Treatment on Pain, Affect, and Sleep in Chronic Pain Subjects. Poster presentation, Virginia Psychological Association, Alexandria, VA

Parker, J. P. & Herridge, M. L. (1995, April). Anterior cerebral activation as a function of light intensity in a hypoxic male: An EEG case study. Poster presentation, Virginia Psychological Association, Alexandria, VA

### **Additional Research Experience**

March 2000 reviewer for National Council of Family Relations annual conference.

June 1998 – Sept 1998 - Interviewed agents for a needs evaluation project with Virginia Cooperative Extension. Project investigators, Rick Peterson Ph.D., and M. J. Sporakowski, Ph.D.

1996, Changes Clinic, Roanoke, VA Neuropsychological evaluation study with Pam Melton, Ph.D., & Alan Katz, Ph.D. Assisted in design of neuropsychological study of substance abuse (comparing clinical population to control, and assessing pre/post - treatment differences)

