THE RELATIONSHIP BETWEEN DYADIC PARENT-CHILD COHESION AND ADOLESCENTS' SELF-CONCEPT

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Abstract

The current study investigated the relationships between mother-child, father-child, parent-cohesion, and children's self-concept. Participants included 30 early adolescents (ages 10 to 15 years) from intact family arrangements. Children completed a modified version of the Family System Test (FAST) to assess levels of parent-child cohesion. The Piers-Harris 2 was used to evaluate dimensions of self-concept. A series of sequential multiple regressions were performed to determine the relationships parent-child cohesion variables had with self-concept constructs, after controlling for the children's sex and typical grades. Only father-child cohesion scores significantly related to adolescents' ratings on specific facets of self-concept (i.e., Behavioral Adjustment, Intellectual and School Status), suggesting that children who report feeling closer to their fathers also endorsed items reflecting less problematic behavior and more intellectual/academic competence. Findings suggest mothers and fathers contribute differentially to adolescents' self-concept. Implications for parental education and ensuring children have a caring, male role model are discussed. Limitations to the study included issues with sample size, generalizability, and data collection.

Chapter 1: Introduction

The influence of family on children's adjustment is well-documented. This has been demonstrated through rigorous research utilizing a variety of measures with children of many different ages. Family variables have been investigated in relation to adolescents' behavior and mental health. Much of this research has focused on the externalizing behaviors (e.g., delinquent behaviors, hyperactivity) of adolescents (e.g., Bischof, Stith, & Wilson, 1992; Bowers, Smith, & Binney, 1992; Lucia & Breslau, 2006; Protinsky & Shilts, 1990; Shields & Clark, 1995; Smart, Chibucos, & Didier, 1990; Smets & Hartup, 1988). However, the internal states of adolescents also appear sensitive to factors inherently tied to the family. For example, a strong research base has developed which links family environment variables (e.g., parent conflict, family cohesion) to adolescent depression (e.g., De Ross, Marrinan, Schattner, & Gullone, 1999; Kashani, Allan, Dahlmeier, Rezvani, & Reid, 1995; Sheeber, Davis, Leve, Hops, & Tildesley, 2007). Less data is available regarding the family's impact on adolescents' self-appraisals of various domains pertinent to daily functioning.

Family and Self-Concept

Traditionally, research involving the family's influence on children's self-concepts has focused on the physical structure of the family, which describes its composition, or the number and type of members in a given system. Interest in the effects of various family types on children is likely due to increases in divorce rates and the diminishing presence of the *traditional* nuclear family. Single-parent and blended families are becoming more prevalent in today's society. For example, in their review of the literature, Sweeney and Bracken (2000) cite a host of studies that suggest that children from divorced families have lower self-concepts than their peers from intact families. However, to date, research on the effect of family functioning on

children's self-concepts has been sparse, with a significant portion of the research base coming from international sources.

When viewed holistically, research lends support for family systems theory, which links children's functioning with the general level of their family's functioning. The findings suggest that a cohesive (Baldwin & Hoffmann, 2002; Cooper, Holman, & Braithwaite, 1983; Kawash & Kozeluk, 1990; Medveďová, 2000), orderly (Hoelter & Harper, 1987; Robinson, 1995), and appropriately expressive (Lau & Kwok, 2000; Vosler, Green, & Kolevzon, 1985) family environment is conducive for positive child development. There is also evidence to suggest that family relationships may be the most pertinent aspect of family functioning on children's developing views of themselves (Gorbett & Kruczek, 2008; Lau & Kwok, 2000). Although the majority of previous research in this realm has focused on the physical structure of the family unit, family functioning appears to be a more prominent factor involved in children's self-perceptions (Cooper et al., 1983; Raschke & Raschke, 1979; Vosler et al., 1985). Nevertheless, family structure must be taken into account, especially considering the amount of variability present in families today.

The Structural Approach and Assessment

The structural approach was developed from Salvador Minuchin's clinical work with families in poverty. Minuchin believed that the individual was inexorably linked with the family unit (Minuchin & Fishman, 1981). Rooted in systems theory, structural family therapy assumes that the family is a system, composed of smaller subsystems. These systems operate in predictable ways to maintain homeostasis (Navarre, 1998). A functional family establishes clear roles, rules, and hierarchies that allow members to experience individual growth and differentiation as they navigate life's challenges.

Minuchin (1974) also underscored the importance of maintaining appropriate boundaries between family members. Boundaries describe the level of affiliation between members of a system, portraying the degree of emotional and physical proximity, or distance between constituents. With appropriate individual boundaries, family members can experience an emotional connectedness to kin while simultaneously developing personal autonomy (Minuchin, 1974). Boundaries are viewed as highly variable, each possessing a specific set of norms for emotional and physical proximity in a system. Minuchin theorized that boundaries exist along a continuum, ranging from rigid to diffuse. Rigid boundaries are characterized by the absence of intimacy and connectedness. Subsystem members disengage from one another; only high levels of stress are capable of "activating" (p. 404) family members to cross rigid boundaries into supportive roles (Johnson & Waldo, 1998). Conversely, enmeshed relationships develop from diffuse boundaries. Here, members of the family overidentify with one another and individuals are unable to differentiate. In diffuse configurations, only small amounts of stress are needed to affect other members. Minuchin (1974) contended that both enmeshed and disengaged family structures were detrimental to their members. Forging a balance between these polar entities, where an appropriate level of emotional bonding or cohesion is achieved, is considered vital for healthy child development (Olson, Russell, & Sprenkle, 1980).

In order to effectively measure abstract concepts such as cohesion, one requires an instrument that was designed with family interaction patterns in mind. One such measure is the Family System Test (FAST) (Gehring & Feldman, 1988). The FAST was developed using structural family systems theory as its basis. The instrument utilizes a clinically-derived figure placement technique to represent cohesion and power in the family as a whole, and in familial

subsystems, including relationships between parents, siblings, and parent-child relationships (Gehring & Wyler, 1986).

Current State of Family Cohesion Research

Research has shown positive correlations between family cohesion and various measures of adolescent functioning, including self-esteem, academic achievement, and individuation; it also appears to serve as a protective factor against deviance and school misconduct (e.g., Farrell & Barnes, 1993). Family cohesion has also been negatively linked with adolescent depression (e.g., Barber & Buehler, 1996; Cumsille & Epstein, 1994; Farrell & Barnes, 1993), anxiety (e.g., Farrell & Barnes, 1993) and externalizing behaviors (e.g., Barber & Buehler, 1996; Richmond & Stocker, 2006). To date, little research has moved from viewing cohesion of the entire family to investigating the effects of individual parent-child (e.g., mother-child, father-child) cohesion levels (Wentzel & Feldman, 1996). It is reasonable to postulate that information on child adjustment may be neglected in the current methodological approach to cohesion research. The nature of dyadic cohesion patterns may provide salient insights into the child's internal experience and external behavior. Also, it is possible that the degree of closeness between a child and his/her mother or father could be very different. Further exploration of these relationships may illuminate fundamental differences between maternal and paternal cohesion patterns.

One study that did look at family cohesion and power in the context of mother-child, father-child, and mother-father relationships was conducted by Wentzel and Feldman (1996). Dimensions of family cohesion and power were assessed using the Family System Test (FAST). Ninety-nine adolescent participants were instructed to depict distinct aspects of their family structure using a figure placement technique. In an effort to better understand the social and

emotional adjustment of the adolescents, participants also completed the Children's Depression Inventory, the Weinberger Adjustment Inventory, and the Social Acceptance subscale of the Perceived Competence Scale for Children. The latter utilizes six items to measure the extent to which a child feels he or she is liked and accepted by peers. Analyses of dyadic cohesion and adolescent adjustment suggested parent-child relationships had a more consistent relation to adjustment for girls than boys. Daughters who reported high levels of mother-daughter cohesion tended to score higher on items assessing levels of self-restraint. In this study, self-restraint was associated with an individual's ability to suppress aggression, show consideration for others, and demonstrate impulse control and responsibility. In regard to social self-concept, cohesion was positively related to social self-concept in all parent-child configurations with the exception of the father-son dyad. Although these results are noteworthy additions to the research base, further investigation of the relationships between individual parent-child cohesion levels and global self-concept, as well as other distinct facets of self-concept, is needed.

Developmental Considerations

When investigating the relationship between family functioning and children's self-concepts, respect must be paid to developmental trajectories. One developmental period that is marked by quantitative and qualitative changes in the parent-child relationship is adolescence. Early adolescence is a brief, but exceptionally tumultuous time in the lives of children. Research suggests that during this developmental period, children are actively attempting to expose themselves to new information and experiences (Harvey & Byrd, 1998). In the midst of their personal exploration, these youngsters often must face a myriad of major life transitions (e.g., physiological, emotional, sexual, social, educational). The cumulative effects of these factors are considerable. Internally, young adolescents feel less competent and worthwhile. Declines in

self-esteem are noted well into middle adolescence (Harter, 1999). In a review of the adolescence literature, Steinberg and Morris (2001) noted that the inverted U-shaped developmental curve that is typically associated with externalizing problems in adolescence does not appear to also characterize internalizing problems. Rather, the prevalence of internalizing problems, like depression, increase during early adolescence and continue to increase during adulthood.

It is reasonable to postulate that, during this time of socio-emotional flux, relationships with caregivers may be a critical factor. Adolescents may directly (e.g., asking questions) and indirectly (e.g., observing their parents) seek information from their caregivers. However, more importantly, the quality of the parent-child relationship during early adolescence may serve as a protective factor against internal maladies. Warm, supportive parent-child relationships would allow caregivers to identify and emotionally scaffold vulnerable youth, providing an encouraging relationship in which to *try out* their new selves. The manner in which an individual is able to navigate these challenges is important; the role of adolescents' behavioral factors and experience have implications for adult adjustment and well-being (Gayman, Turner, Cislo, & Eliassen, 2011). Thus, given the importance of this seemingly pivotal transition period, additional research regarding early adolescents' experience seems warranted.

Current Study

The current study examined mother-child and father-child cohesion patterns and their relation to self-reported adolescent self-concept constructs, as measured by the Piers-Harris Children's Self-Concept Scale - Second Edition. To effectively do so, the various forms families can take in today's society must be considered and controlled for. Thus, the present study excluded all but intact families. It was hypothesized that family boundaries have considerable

influence on the internal experience of children. By considering parent-child cohesion configurations through a structural perspective, using the FAST, the researcher sought to clarify if the degree of emotional closeness present in parent-child dyads is related to adolescents' self-perceptions. Furthermore, the present study explored if these trends vary between mother-child and father-child relationships. This knowledge may prove valuable in selecting clinical and therapeutic interventions. For example, targeting interactions between parent(s) and child may produce notable improvements in the way adolescents think about themselves. This in turn may increase self-satisfaction and help adolescents live happier, fuller lives. The research questions for this paper included:

1. Do mother-child cohesion levels relate to children's self-concept?
2. Do father-child cohesion levels relate to children's self-concept?
3. Do differences between mother-child and father-child cohesion profiles reliably predict children's self-concept?

Chapter 2: Literature Review

The Rise and Fall of Family Therapy

Family therapy's origins can be traced to the establishment of child guidance clinics in the early 1900s. At the time, a number of clinicians began involving the families of clients with whom they conducted individual therapy. These therapists were becoming frustrated with individual treatment modalities, as they noted many of their efforts were compromised by family members who had difficulty adjusting to therapeutically-induced changes in their kin (Josephson, 2008). By the 1950s, family therapy had emerged as a distinct field with a number of novel ways to view the family unit (Kaslow, 2010). Various theoretical orientations were conceptualized and refined by a number of charismatic leaders. As their theories gained followers, distinct *schools* of family therapy emerged.

One such orientation was family systems therapy, which became the backbone of many schools of family therapy (e.g., structural, strategic, experiential). Family systems therapy drew from emerging systems thinking in biology to offer a new perspective on family functioning. Families were viewed as the basic unit of treatment. Individual dysfunction could be attributed to problems inherent in the system. In fact, some radical pioneers in the field espoused that individuals did not exist at all and that all people were unequivocally influenced by larger systems (Josephson, 2008). These leaders put less emphasis on individual diagnosis and questioned the linear thinking of the medical community.

Family therapy's proliferation continued into the 1970s. Over 1,500 articles and 200 books on marital and family therapy were published between 1970 and 1979. Professional journals increased from two to more than ten. The American Association for Marriage and Family Therapy's (AAMFT) membership increased eightfold during this time (Olson et al.,

1980). Shortly after the 1980s, family therapy's growth slowed considerably. This was due to many factors including family therapy's anti-medical attitudes, within-discipline disagreements over training, and a historical division from other psychotherapies. However, a lack of empirical support for family therapy theory and treatments was, perhaps, the most critical factor that slowed its expansion (Crago, 2008).

Early on, leaders of various schools of family therapy often taught and demonstrated their approaches with only anecdotal research to validate their efficacy (Kaslow, 2010). When researchers attempted to empirically validate family therapy treatments, they were confronted with a number of methodological issues. For example, face-to-face, talk therapy is rooted in language and the presence of a therapist, making replication almost impossible. Words can vary from client to client, therapist to therapist, and from one session to another within each therapist (L'Abate, 2007). In addition to these barriers, advocates of face-to-face talk therapy argued that evidenced-based practices inhibited therapeutic creativity, seriously limiting the artistic freedom of the skilled clinician.

Nevertheless, current practitioners of family therapy have advocated connecting family therapy techniques/theory to validated research. Of particular importance is the evaluation of therapeutic processes and outcomes, both quantitatively and qualitatively (Kaslow, 2010). This increases accountability for the therapist and demands that clinicians utilize methods that are the most likely to produce positive therapeutic change. Similarly, efforts have been made to identify which modes of therapy are more effective for which group of clients presenting which sorts of problems (Olson et al., 1980). To date, family therapy is attempting to fill the void that exists between research, theory, and practice. Producing sound research that lends credence to, and extends, family theory is a critical step in this process.

Linear and Curvilinear Conceptualizations of Cohesion

One of the areas that has received considerable scientific scrutiny in recent years is the construct of cohesion. Two distinct theories have emerged regarding cohesion's relationship to family functioning: the curvilinear hypothesis, founded on classic elements of structural family therapy, and the linear hypothesis (Yahav, 2002). Theorists and researchers utilized Minuchin's conceptualization of family boundaries to create the curvilinear hypothesis. The curvilinear hypothesis is based heavily on the work of Minuchin and Murray Bowen (1960), in that cohesion is viewed as the degree of emotional bonding, or connectedness, among family members. From this perspective, both high and low levels of cohesion are viewed as dysfunctional. Intermediate levels of cohesion are the most adaptive. Such configurations allow individuals to strive for personal independence with the emotional support of their kin (Manzi, Vignoles, Regalia, & Scabini, 2006).

Detractors of the curvilinear hypothesis argue that cohesion is positively correlated with various measures of family functioning (Barber & Buehler, 1996; Cluff, Hicks, & Madsen, 1994; Perosa & Perosa, 2001). In this alternative paradigm, the linear hypothesis, low levels of cohesion would produce disengagement between family members, and high levels of cohesion would be characteristic of supportive, nurturing relationships. Thus, the linear hypothesis endorses a simpler conceptualization of cohesion, as a purely beneficial relational factor.

To date, researchers have been unable to completely affirm either theory. Faulty research designs, distinctions between nonclinical and clinical families, sampling issues, and terminology confusion have produced a precarious research base in this area. Both linear and curvilinear models can cite modest empirical support, but substantial support for either hypothesis is still lacking.

The circumplex model and support for the curvilinear hypothesis. Olson, Sprenkle, and Russell (1979) utilized the curvilinear conceptualization of cohesion, along with adaptability, to create the Circumplex Model. In this paradigm, adaptability refers to "…the ability of the marital/family system to change its power structure, role relationships, and relationship rules in response to situational and developmental stress" (p. 12). This definition was later refined to represent a family's organizational structure and flexibility (Perosa & Perosa, 2001). According to the Circumplex Model, cohesion and adaptability each contain four separate levels. A family's level of cohesion could be classified as disengaged, separated, connected, or enmeshed. Correspondingly, adaptability was divided into chaotic, flexible, structured, and rigid levels. It was hypothesized that optimal family functioning occurred in the intermediate range of both continua. Based on adaptability and cohesion scores, families could be further classified into one of three groupings (i.e., Balanced, Midrange, and Extreme). Families in the "Balanced" grouping demonstrate moderate levels of both adaptability and cohesion; they are expected to exhibit the healthiest functioning. Adequate functioning was expected from those in the "Midrange" group, whereas families in the "Extreme" group should be the most dysfunctional (Olson et al., 1979). A third facilitating dimension, communication, was also included in the model. Communication is not graphically included in the Circumplex Model because it is viewed as a vehicle for family movement along the other two dimensions (Olson, 2000).

In order to validate their hypothesis that balanced systems are more functional than unbalanced ones, Olson et al. (1979) developed the Family Adaptability and Cohesion Evaluation Scale (FACES). Since its inception the FACES, and subsequent revisions (i.e., FACES II, FACES III), have been used in a myriad of studies and dissertations. In that time,

more than 250 studies have supported the assertion that balanced family systems function better than unbalanced units. However, when the findings of these studies were viewed collectively, it became apparent that the FACES cohesion and flexibility scales showed definite linear trends (Olson, 2000). Believing that cohesion and flexibility had curvilinear relationships with family functioning, Olson reexamined the FACES. He hypothesized that the linear trends that permeated the professional literature were due to the FACES inability to accurately measure the unbalanced, or extreme, areas of these constructs. In other words, the FACES self-report scales measured cohesion and flexibility in a linear way. He subsequently developed a three-dimensional version of the Circumplex model, which would better allow findings from all FACES studies to be integrated into one model. This new model separated Balanced, Midrange, and Extreme family types into a cone-like configuration according to their dynamic similarities. It also better incorporated first- (i.e., within family) and second-order (i.e., complete system) changes (Olson & Gorall, 2003).

Although the bulk of research using the FACES II and III suggested linear relationships existed between cohesion and various family variables, Olson argued that strong support for the curvilinear nature of cohesion had been found using the Clinical Rating Scale (CRS) (Olson, 2000). While the FACES is a self-report measure, the CRS relies on the ratings of clinicians to assess family adaptability, cohesion, and communication. Each of these three family dimensions is composed of unique subscales. The family cohesion subscales of the CRS include emotional bonding, family involvement, marital relationship, parent-child relationship, internal boundaries, and external boundaries. Family adaptability encompasses leadership, discipline, negotiation, roles, and rules. Finally, subscales for family communication include listener skills, speaker skills, self-disclosure, clarity, continuity/tracking, respect, and regard. With the use of clinical

interviews and/or family interaction tasks, clinicians could catalog families in each of these pertinent areas. Specific anchor points for each family dimension guide their endorsements. Ratings from all three family dimensions and their corresponding subscales are then summarized in the Family Profile (Thomas & Olson, 1994).

In one study, the CRS was utilized to compare families who were currently receiving clinical services to nonclinical families. The authors hypothesized that more clinical families would fall in the extreme system types than those in the nonclinical group (Thomas & Olson, 1994). The CRS was used in unison with the FACES-III to assess family cohesion, adaptability, and communication. Data from the CRS strongly supported the authors' assertion that far more clinical families were classified as extreme system types. With respect to cohesion, 73.4% of all clinical families fell in the "Disengaged" and "Enmeshed" regions of the Circumplex Model; only 26.6% of the sample could be characterized as balanced systems. Regression analyses, using family satisfaction and communication as indicators of family functioning, also supported these findings. Curvilinear relationships between cohesion/adaptability and the family functioning variables were observed. Results from the FACES III did not mirror these findings, however. In response to this finding, the authors concluded that the CRS was "…more viable in distinguishing functional from dysfunctional families and in supporting the curvilinear notion of the Circumplex Model" (p. 42). In justifying this assertion, they noted that the CRS better operationalized the Circumplex dimensions than the FACES III by utilizing the four levels of cohesion and adaptability in the subscale anchor points. Thomas and Olson (1994) also proposed that the observational nature of the CRS allowed for more accurate depictions of family processes. Individual family members may have difficulty objectively depicting their family's relational patterns.

Support for the linear hypothesis. Advocates of the linear hypothesis have attempted to disentangle the constructs of "enmeshment" and "cohesion". They argue that ambiguous operational definitions have resulted in erroneous, misleading, and conflicting research findings. Confusion over exactly what these terms mean is pervasive and can be traced back to early pioneers in marriage and family therapy. For example, in their theoretical analysis of the concepts of "enmeshment" and "cohesion", Green and Werner (1996) note that Salvador Minuchin presented two very different meanings for "enmeshment" in his work *Psychosomatic Families*. In two adjoining paragraphs Minuchin first refers to "enmeshment" as the inability for family members to differentiate. He then references "enmeshment" as it relates to subsystems, especially mother-child dyads. In doing so, "enmeshment" is described as a style of extreme closeness and caregiving. Although similar, these are distinct concepts that describe diverse effects on family functioning (Green & Werner, 1996).

Unlike the curvilinear theory, the linear hypothesis suggests that cohesion is the degree to which family members are positively supportive and responsive to one another (Barber & Buehler, 1996). Extreme or high levels of cohesion are indicative of healthy family functioning. Enmeshment is viewed as a purely deleterious relational factor, separate and distinct from cohesion. It depicts controlling and constraining interactions between individuals that prevent personal growth and exploration.

Barber and Buehler (1996) utilized similar operational definitions for enmeshment and cohesion to investigate whether the two constructs had differing effects on preadolescents' and adolescents' internalizing and externalizing problems. Subscales from the Colorado Self-Report of Family Functioning Inventory were used to assess family cohesion and enmeshment, while four subscales of the Child Behavior Checklist, Youth Self-Report, measured adolescent

problems. The Withdrawn and Anxious/Depressed scales were used to gauge internalizing problems; the Delinquent Behavior and Aggressive Behavior scales were used to index externalizing problems. Results provided some support for the contention that enmeshment and cohesion are distinct constructs. First, adolescent reports of cohesion and enmeshment were unrelated to each other. If enmeshment does in fact represent high levels of cohesion, some correlation between the two would be expected. It was also found that cohesion and enmeshment were differentially associated with the internalizing and externalizing problems of adolescents (Barber & Buehler, 1996). Cohesion was *negatively* correlated with internalizing and externalizing problems. Conversely, enmeshment was *positively* linked with youth problems, especially internalizing problems. No correlation was found between enmeshment and delinquency, however enmeshment was positively associated with student aggression. With respect to grade and sex interactions, data suggested the two constructs interacted differently with these variables. Enmeshment, along with sex and grade, predicted withdrawal. Cohesion, however, did not. Overall, cohesion's relationship to adolescent functioning was found to be predominantly linear; however, a U-shaped curvilinear relationship was noted between family cohesion and youth aggression. This finding remained significant even after controlling for enmeshment, suggesting that the relationship between cohesion and aggression is affected by a variable other than "enmeshment", as measured in this study.

Another study that found support for a linear relationship between cohesion and aspects of family functioning (i.e., family communication) was conducted by Perosa and Perosa (2001). High school seniors and college freshman completed measures of family cohesion and adaptability, communication expressiveness and clarity, and problem solving. Various subscales of the Structural Family Interaction Scale–Revised (SFIS-R), Family Environment Scale (FES),

Family Assessment Device (FAD), and FACES III were combined to form distinct variables. The researchers assembled two cohesion variables, Cohesion L (linear) and Cohesion C (curvilinear). The Cohesion L variable encompassed linear aspects of cohesion based on the concept of emotional bonding. This was accomplished by compiling 3 scales from the SFIS-R (i.e., Mother-Child Cohesion/Estrangement, Father-Child Cohesion/Estrangement, and Spouse Conflict Resolved/Unresolved), the Cohesion scale from the FES, and the Affective Involvement scale from the FAD into a single construct. Three family therapists rated the resulting scale and noted it exhibited "… a linear unidimensional direction rather than being curvilinear or ambiguous" (p. 410). The Cohesion C variable was based on curvilinear aspects of cohesion and specifically tapped concepts of family togetherness. It was composed of 5 items from the FACES III Cohesion Scale that the three family therapists had rated as being clearly curvilinear or ambiguous. Communication expressiveness was measured by combining the Conflict Expression/Avoidance subscale from the SFIS-R with the Expressiveness subscale from the FES. Communication clarity was taken directly from the Communication scale from the FAD. Similarly, problem solving was assessed using the Problem Solving scale from the FAD. Results supported the linear hypothesis. A linear relationship was observed between cohesion and communication expressiveness, clarity, and problem solving. This finding remained constant, regardless of the cohesion definition used (i.e., emotional bonding or family togetherness).

Self-Concept

Like cohesion, self-concept is still an often misunderstood entity by professionals and laymen alike. Self-concept is commonly used interchangeably with "self-esteem" when, in fact, they are distinct but related constructs (Manning, Bear, & Minke, 2006). Self-esteem relates to an individual's global feelings of self-worth and acceptance. This overall evaluation of one's

self is expressed in a specific level of general happiness and satisfaction. Rosenberg (1979) extended this definition by theorizing that only salient aspects of the self, which may vary across different environments, contribute to self-esteem. In other words, individuals weigh the importance of various self-concepts (e.g., physical appearance, scholastic competence) differently. Those domains that are perceived as most pertinent to the individual will have the greatest influence on their self-esteem. Correspondingly, negative or positive self-concepts in areas believed to be unimportant to the individual will have little overall impact (Farmer, Jarvis, Berent, & Corbett, 2001).

Self-concept, on the other hand, refers to an individual's perceptions of competence in a variety of specific domains. It is best described as a multidimensional construct. Since self-concept cannot be adequately understood if its multidimensionality is ignored, researchers have traditionally struggled to reach consensus on a single, all encompassing definition of general self-concept (Marsh, 1986). Marsh (1986) summarized a number of common operational definitions for general self-concept:

> (a) a hierarchical general self that appears at the apex of hierarchical models; (b) a conglomerate general self that is the total score from a hodgepodge of self-referent items that attempt to sample broadly from a range of characteristics; (c) a global self-esteem scale that is relatively unidimensional and content free in that it is composed of items that infer a general sense of self-worth or self-confidence that could be applied to many specific areas; (d) a discrepancy general self for which ratings of specific facets of self (actual ratings) are subtracted from ideal ratings. (p. 1224)

Despite the differences noted, current theory and research suggest that general self-concept is best described as global feelings of satisfaction with oneself, or what is traditionally known as self-esteem (Manning et al., 2006).

Although there is some debate as to how many specific domains comprise general self-concept, researchers agree that they fall into two basic categories, academic and nonacademic. According to Marsh (1986), academic domains included "Math", "Verbal", and "General School". Harter (1988) compiled these domains into a single construct she termed "Scholastic Competence". Nonacademic domains are present outside the educational realm and include categories like physical abilities, peer relations, appearance, behavioral conduct, and opposite-sex relations (Marsh, 1986). Theorists have tended to conceptualize these various domains and subdomains into a hierarchical structure. Typically this has been done with general or global self-concept at the top of the model. The organizational structures thereafter vary across theorists. Marsh conceptualized two separate levels below global self-concept, consisting of two broad domains (i.e., academic, nonacademic) and their corresponding subdomains (i.e., verbal, math, and general school for academic; physical abilities, physical appearance, parent relations, same-sex relations, opposite-sex relations, emotional stability, and honesty/trustworthiness for nonacademic). Harter proposed another configuration with only one level below global self-concept, which contained eight domains (i.e., scholastic competence, athletic competence, behavioral conduct, physical appearance, job competence, close friendship, romantic appeal, social acceptance) (Manning et al., 2006). To date, research has been unsuccessful in determining the exact hierarchical nature of self-concept; it's also possible that the hierarchy varies from individual to individual (Harter, 1999).

Self-concept is not static over the lifespan. Children, adolescents, and adults show predictable alterations in their self-perceptions. Such changes typically coincide with cognitive-developmental stages, as the ability to evaluate oneself is a task that is constrained by an individual's current level of cognitive development (Broderick & Blewitt, 2006). Children develop their ability to perceive differences in their competence in various domains as early as age four. However, they are unable to recognize as many domains as their adult counterparts (Harter, 1999). Research suggests that youngsters possess self-perceptions regarding relations with peers and parents, physical competence, and cognitive competence, yet they are unable to consolidate these perceptions into a cohesive global self-worth (Manning et al., 2006). The cognitive faculties necessary to formulate this construct don't appear to be fully developed until middle childhood (Harter, 1999). This cognitive immaturity also impacts the quality of youngsters' self-perceptions. Young children tend to view their competencies in all domains quite positively (Manning et al., 2006).

As children age, they are able to assess their competence in an increasing number of domains, from approximately four in preschool to over eight for students in grades nine through 12. In addition, their self-perceptions become considerably more accurate. Universal excellence in every domain is replaced by the notion that the student can excel in some areas and struggle in others. Newly developed perspective-taking skills allow children to compare their proficiencies to others and assess their competence through their peers' eyes (Harter, 1999). As a result, self-perceptions decline as children move through middle childhood and into early adolescence. Young adolescents must attempt to consolidate many abstract representations of themselves into a new, distinct identity. Pubertal changes complicate this task and may also contribute to declines in self-esteem. Typically, it is not until students enter tenth and eleventh grade that

consistent increases in global self-concept are again observed (Harter, 1999). This improvement can be attributed to a number of interrelated factors. Increased independence allows students to pursue activities of interest and demonstrate their specific competencies. Similarly, ever-increasing social ties provide support and encouragement for individual efforts. For example, locating and joining a clique that shares similar interests and values may provide gratifying validation for many adolescents. Social interactions also become easier as maturing perspective-taking skills clue adolescents in to socially acceptable ways of behaving (Manning et al., 2006). It is pertinent to note that these developmental trends are based on mean scores. Thus, although self-concept trajectories appear to be relatively consistent in Western societies, not all individuals follow these prescribed paths. Individual differences in self-concept development can be attributed to a myriad of factors, including number of transitions experienced, the importance individuals place on different areas of self-competence, educational and environmental differences, the effects of gender stereotypes, and the effects of personality variables (Cole et al., 2001).

Adolescence

Most researchers agree that adolescence can be divided into three, distinct developmental periods. Each of these developmental periods has unique characteristics and challenges that may impact later functioning. The first, early adolescence, begins at approximately age 10 and continues until the child enters their *teens* (e.g., 13 or 14). At this point, adolescents are said to have begun middle adolescence, which spans a period of approximately three years. Late adolescence is typically associated with the period of time that occurs from age 18 to the early twenties (Smetana, Campione-Barr, & Metzger, 2006).

Entrance into adolescence can be a trying time for youngsters. The physiological and emotional changes associated with puberty are still very prevalent for individuals between the ages of 13 and 16. Hormonal fluctuations, in combination with negative life events, may make this age group prone to conflict with parents, moodiness, negative affect, and risky behavior (Broderick & Blewitt, 2006). In the midst of these changes, young boys and girls attempt to establish their sexual identities and often begin sexual exploration. Ever-evolving cognitive faculties allow adolescents greater mental independence; teenagers become capable of formal operational thinking. Young adolescents, for the first time, are able to think logically about abstract concepts. This also allows for the ability to construct ideals, which can put these youngsters in a fault-finding stance toward anything that is less than perfect (Broderick & Blewitt, 2006).

In school, young adolescents are typically required to make one or more educational transitions (e.g., elementary school to middle school, middle school to high school). In addition to the physical change in location, young adolescents must adapt to a new model of service delivery. For example, instruction is likely to come from more than one teacher in more than one classroom. Students may be expected to transition between rooms for different subjects. Intimate, stable classrooms of familiar peers become less prevalent as classmates must relocate from class to class (Simmons, Burgeson, Carlton-Ford, & Blyth, 1987). These transitions can simultaneously interrupt and facilitate peer contacts, while exposing the teen to a host of new educational expectations.

Socially, adolescents begin to separate themselves from parents and depend more on peers. Steinberg and Silverberg (1986) asked children ages 10 to 16 a number of questions regarding their emotional autonomy in relationships with parents and their resistance to peer

pressure. Results showed, "For most boys and girls, the transition from childhood into adolescence is marked more by a trading of dependency on parents for dependency on peers rather than straightforward and unidimensional growth in autonomy" (p. 848). Similar findings were noted by Larson, Richards, Moneta, Holmbeck, and Duckett (1996). Using pagers, the researchers collected data on participants' experiences during 16,477 random moments of their lives. Each time the beeper sounded, the participants would indicate who they were with from a list of possible companions, as well as answer open-ended questions about their activity, topic of conversation, and location. Information on family relationships from parents and children were also collected using the Conflict and Cohesion scales of the Family Environment Scale. Results suggested that the amount of time adolescents spent with their families decreased from 35% to 14% between fifth and 12th grade. Adolescent disengagement seemed to be unrelated to family process variables; measures of family conflict, cohesion, and adolescents' perceptions of closeness to mother and father revealed no significant correlations with age differences in amount of time spent with family (Larson et al., 1996). In fact, although the total time adolescents spent with their families decreased, certain facets of family time did not. Most notably, the time adolescents spent one-on-one with their mothers and fathers remained stable across age periods. Those facets that did decrease with age tended to be less communication oriented (e.g., TV watching), while time spent talking did not decline. These findings suggest that despite spending less overall time with family, young adolescents still maintain seemingly pertinent contacts with their parents.

Without question, each child's journey into adolescence is unique. The types of life transitions endured and the way they are perceived can differ dramatically across individuals. Nevertheless, research suggests that simultaneously coping with multiple transitions can have

negative consequences (Cole et al., 2001; Simmons et al., 1987). One longitudinal study looked at the effects of multiple life changes on adolescents' self-esteem, academic grade-point average, and participation in extracurricular activities. Girls' self-esteem demonstrated significant declines as the number of life changes experienced increased. Furthermore, both males and females showed declines in GPA and participation in extracurricular activities as exposure to life changes increased (Simmons et al., 1987). Thus, with their exposure to a plethora of life stressors, it is reasonable to postulate that young adolescents are a vulnerable developmental group. With much of their world in flux it appears that, for most young adolescents, their relationships with parents remain a source of relative stability. Examining the quality of these adolescent-parent relationships may provide valuable information about the internal experience of young teens.

Family Functioning and Self-Appraisals

Researchers have taken many approaches in understanding the power of the family unit on the internal experience of children and adolescents. Such contributions have not been limited to one theoretical orientation or school of psychological thought. Rather, the different methodologies and perspectives researchers have applied in uncovering the connections between various aspects of family functioning and youngsters' self-appraisals have created an intricate mosaic of the family experience. Only by carefully considering each piece can we begin to understand the influence of this complex system.

To begin, some pertinent findings can be drawn from attachment literature. Papini and Roggman (1992) utilized the Inventory of Parent and Peer Attachment (IPPA) to gauge adolescents' degree of parental attachment at three different time periods in adolescents' lives: spring term of 6th grade (Time 1), the first 2 months of 7th grade (Time 2), and the spring term of

7th grade (Time 3). In addition to parent-attachment, the Emotional Autonomy Scale, the Self-Perception Profile for Children, the Child Manifest Anxiety Scale, and the Child Depression Inventory were employed to quantify emotional distance from parents, various dimensions of self-worth, anxious symptomology, and feelings of depression, respectively. A significant, positive correlation was observed between parental attachment and self-perceived competence, especially during the adolescents' transition to junior high school (Time 2). It was only at this pivotal transition period that statistically significant correlations between parental attachment and nearly all domains of self-competence (i.e., global self-worth, social acceptance, athletic competence, physical appearance, and behavioral conduct) were evident. At times one and three, correlations between parent-child attachment and domains of self-competence were positive but generally not statistically significant. Parent-child attachment was also significantly negatively correlated with adolescent depressive and anxious symptomology, suggesting that it may serve as a protective factor.

In an attempt to clarify the relationship between various family variables and the perceived self-esteem of early and late adolescents, 127 New Zealand adolescents completed a variety of assessments including the Family Environment Scale, Self-Esteem Inventories, and an adapted version of the Adult Attachment Scale (Harvey & Byrd, 1998). In comparing the two groups, the self-esteem of early adolescents was more strongly associated with patterns of attachment to caregivers; anxious and avoidant parental bonds were positively related to general self-esteem levels. Conversely, no significant relationships were observed between any measures of self-esteem and attachment in late adolescents. Rather, environmental factors, intrinsic to the family system, were the most salient predictors of self-esteem. For example,

variables like family intellectual-cultural orientation, recreational orientation, and moral-religious orientation had significant positive correlations with home self-esteem.

A number of studies have considered both structural and interpersonal family variables and their relationship with self-esteem. Using surveys constructed specifically for their study, Hoelter and Harper (1987) collected data from 905 high school students, from grades nine to twelve. Structural data collected included family size, family type, respondent's age, father's education, and mother's education. Process or interpersonal information was also accrued; this included family support, parent conflict, sibling conflict, respondent/parent conflict, and respondent/sibling conflict. The authors chose six items from Rosenberg's Self-Esteem Scale to assess participants' self-esteem. Finally, son/daughter identity salience, described as the relative importance of being a son/daughter in defining one's self, was measured by students' responses on a 7-point semantic differential response format across seven scales. Results indicated that of all the variables measured, family support exerted the most influence on self-esteem and son/daughter identity salience. This trend showed no significant sex differences. Interestingly, some structural family variables (i.e., nontraditional family arrangements, family size) were negatively correlated with family support. This may suggest the physical organization of a family can impact the ability of that unit to effectively care for its constituents.

Vosler et al. (1985) conducted a study with juvenile probationers and their families to examine the influence of family competence and physical structure on children's ratings on the Piers-Harris Children's Self-Concept Scale. The researchers used the term "family competence" to describe family functioning on a number of variables, including strength of parental coalitions, nature of family affect, amount of conflict, freedom of expression, and the ability to solve problems through negotiation. This was measured by averaging item scores from the Family

Awareness Scale. Supporting the findings of many previous studies on family composition, a bivariate analysis revealed that children from two-parent families had significantly higher self-concepts than those from one-parent family arrangements. Similar analyses identified a significant relationship between family competence and children's Piers-Harris scores. A regression analysis, involving family competence and physical family structure, suggested that family competence was a significantly better predictor of children's self-concept scores.

Similarly, Robinson (1995) found that perceived peer and parental support were pertinent interpersonal sources in predicting adolescents' self-worth. Three-hundred seventy adolescents, from grades seven through twelve, completed a revised version of the Social Support Scale for Children, which measures emotional support, approval, and instrumental aid; these three types of support were crossed with six different sources (i.e., mother, father, best friend, classmates, teacher, and romantic interest). Participants also completed the Self-Perception Profile for Children/Adolescents. Results showed that perceived approval had the strongest link with adolescent self-worth, especially with respect to peer counterparts. In total, data emphasized the importance of both peer and parental support throughout adolescence.

Family conflict and composition were the focus of a study by Raschke and Rashchke (1979). Using third, sixth, and eighth grade participants, children's Piers-Harris scores were correlated with their responses on a family questionnaire. The questionnaire measured perceptions of family conflict, family structure, and background information. Family composition (i.e., intact, single-parent, reconstituted) had no significant effect on children's concepts. Rather, family conflict emerged as a pertinent predictor. Children who perceived greater conflict in their families had lower self-concepts. Parental happiness was positively

correlated with the children's self-concepts. Factors such as age, sex, race, and number of siblings were found to be unrelated to children's self-concept scores.

With respect to family cohesion, a number of studies have been conducted with the specific aim of linking the degree of a family's connectedness with youngster's self-perceptions. When viewed holistically, the research base suggests that a cohesive family unit positively impacts children's self-concept. One such study utilized the Self-Esteem Inventory in unison with the FACES-III with a sample of 328 eighth grade students (Kawash & Kozeluk, 1990). Although no gender differences emerged from the statistical analyses, family cohesion was found to have a linear, positive correlation with students' self-esteem scores.

These findings converge with those of Medveďová (2000), who investigated the relationship between adolescent self-esteem and a number of family variables. Aspects of family cohesion, expressiveness, conflict, independence, orientation to achievement, intellectual cultural orientation, recreation orientation, moral global-opinion orientation, organization, and control were assessed in 391 early-adolescents using the Family Environment Scale. In addition, participants' perceptions of their parents' behaviors were quantified with the Parent Behavior Questionnaire; the resulting data was refined into 3 composite scores that represented parents' Loving, Punishment, and Demanding behaviors. Family cohesion emerged as the best predictor of adolescent self-esteem, especially for males. Furthermore, family expressiveness, recreational orientation, and organization displayed statistically significant, positive correlations with self-esteem for both sexes. Strong negative correlations were observed between family conflict and self-esteem. Last, the Loving behaviors of mothers and fathers were positively linked with self-esteem in all parent-child configurations with the exception of mother-son.

Similar findings were reported by a study that involved 467 randomly selected fifth and sixth graders from primary schools in Australia (Cooper et al., 1983). Data on family functioning was collected via a pictorial measure of family cohesion. Different family configurations were represented by diagrams that depicted family members as small circles within a larger circle. A child and family questionnaire was also employed. This instrument was used to collect data regarding the child's happiness in the family as well as their perceptions of conflict in family relationships. Again, self-concept scores on the Piers-Harris decreased with diminishing family support; children who perceived conflict between their parents or between themselves and their parents reported lower self-concepts. Family composition alone did not relate most to children's self-concept. Rather, the quality of the parent-child relationship was observed to be the most influential factor.

Longitudinal data also support the assertion that being a member of a cohesive family is linked with increased self-esteem, even across the adolescent years (Baldwin & Hoffmann, 2002). Using data from the Family Health Study (FHS), the researchers used a growth curve analysis to explore the relationships among self-esteem, stressful life events, and family cohesion across a seven-year span. Participants ranged, across the seven waves, from early adolescence to early adulthood. Data collection occurred yearly and consisted of the Rosenberg Self-Esteem Scale, FACES-III, the Junior High Life Experiences Survey, the Family Inventory of Life Events and Life Changes, and clinical diagnoses of parental substance use disorder or affective disorder. Results showed that, when controlling for other variables, age had a significant, nonlinear relationship with self-esteem; this suggests that self-esteem is not static during adolescence. The observed fluctuations did not occur uniformly across participants. Instead, variations in self-esteem appeared to differ from individual to individual. No main effects emerged between

respondents' sex and self-esteem, however significant gender differences were evident across ages. Female participants' self-esteem decreased notably from age twelve to about age seventeen. Males' self-esteem appeared more variable. It increased until age fourteen, then decreased until approximately age sixteen, at which point it showed growth again into early adulthood. Family cohesion was positively linked with self-esteem over time. Analyses suggested this trend was independent of the family's potential buffering effects from stressful life events. Thus, adolescents from cohesive families seem to have higher self-esteem than peers from noncohesive family units.

Like the work of Papini and Roggman (1992), some researchers have explored family functioning's effects on specific domains of self-concept. Lau and Kwok (2000) used an adapted version of the Family Environment Scale (FES) to look at four aspects of children's self-concept: Academic, Appearance, Social, and General. Family environment variables that included cohesion, expressiveness, conflict, achievement orientation, organization, and control were further compiled into three domains: Relationship, Personal Growth, and System Maintenance. Results showed that all three family factors were positively correlated with the self-concept domains; the family relationship was identified as the most predictive of self-concept. Correspondingly, another study utilized the Intimacy, Conflict, and Parenting Style Family Functioning Scales (ICPS) and the Self Description Scale (SDQ II) with an adolescent sample (Noller, Seth-Smith, Bouma, & Schweitzer, 1992). Data analyses indicated that high levels of family intimacy and a more democratic parenting style were associated with higher scores on an array of self-concept dimensions, including General Self, Emotional Stability, Honesty, Physical Abilities, Physical Appearance, Parent Relations, Same-sex and Opposite-sex Relations, Verbal,

and General School. High levels of intra-family conflict were linked with lower self-concept scores.

Gorbett and Kruczek (2008) investigated the relationship of a variety of family variables, including cohesion, on social self-esteem. Social self-esteem describes how an individual may feel about themselves in a variety of social environments. Specifically, it relates to an individual's ability to build and maintain personal, professional, and intimate relationships. Using the FACES III and the Social Self-Esteem Inventory (SSI), researchers sampled 119 college students from a public, midwestern university. The resulting data suggested that of all the family variables (i.e., biological sex, number of siblings, birth order, frequency with which the child was left in the care of others, family cohesion, family adaptability) perceived level of family cohesion was the strongest predictor of social self-esteem.

In summary, self-concept has been identified as a pertinent variable contributing to the mental well-being of individuals. As a cognitive construct, self-concept is heavily influenced by developmental trajectories. Nowhere is this more evident than early adolescence, where a myriad of physiological, social, and environmental transitions confront children. Research shows strong links between family functioning and the self-appraisals of children/adolescents. Furthermore, relational variables, such as cohesion, have been identified as the most salient factors related to self-esteem and various dimensions of self-concept. Although whole-family cohesion has been empirically associated with the quality of children's self-appraisals (Baldwin & Hoffmann, 2002; Gorbett & Kruczek, 2008; Lau & Kwok, 2000; Medveďová 2000), little data exists regarding individual parent-child dyads. Investigating these relationships, as well as specific parent-child cohesion configurations, will likely shed light on the nature of parental

bonds during adolescence. This information could facilitate intervention planning for youngsters who may be at-risk for developing negative self views.

Mother's vs. Father's Influences

The influence of parents on the well-being of their children has received notable attention in the professional literature. This research-base is extremely broad. It addresses offspring of a variety of ages, from toddlers (e.g., Gutman & Feinstein, 2010), to school age children (e.g., Schroeder & Kelley, 2010), and even adults (e.g.,Welsh & Stewart, 1995). Similarly, studies have used a myriad of outcome variables, including age of sexual debut (e.g., Price & Hyde, 2011), executive functioning (e.g., Schroeder & Kelley, 2010), and academic achievement (e.g., Jeynes, 2005). Parental influence has been investigated by treating parents as a singular unit (e.g., Parker & Benson, 2004), while other research has focused solely on the mother's impact on child functioning (e.g., Price & Hyde, 2011). Even fathers have received more attention recently. Historically, the father-child relationship has been largely neglected. This trend has recently abated however, as it is becoming more apparent that the relationships children have with their fathers are pertinent to their well-being (Brotherson, Yamamoto, & Acock, 2003). Despite all we have uncovered regarding how parents shape their children, to date, relatively little is known about the differential impact of mothers and fathers on adolescent's psychological well-being (Videon, 2005).

Rogers, Buchanan, and Winchel (2003) independently evaluated the effects of maternal and paternal psychological control across four dyadic relationships (i.e., mother/daughter, mother/son, father/daughter,and father/son). Three hundred and six adolescent participants were administered an adapted version of the Child's Report of Parental Behavior Inventory (CRPBI) to ascertain the perceived level of psychological control exuded by each parent. Adolescent

internalizing symptoms were then assessed using the Center for Epidemiological Studies-Depression (CES-D) inventory for adolescents, while the Child Deviant Scale provided adolescents' perceptions of externalizing symptoms. Mothers and fathers reported their perceptions of adolescent internalizing and externalizing symptoms with the Child Behavior Checklist (CBCL). High levels of father psychological control were positively correlated with adolescents' internalizing symptoms but only when paired with high levels of mother psychological control; this trend was consistent for sons and daughters. Similar findings existed for externalizing symptoms, but only for adolescent girls.

Videon (2005) used the National Longitudinal Study of Adolescent Health to investigate the effects of the father-child relationship on adolescents' psychological well-being cross-sectionally and over time. Adolescent psychological well-being was quantified using a portion of the Center for Epidemiologic Studies Depression Scale (CES-D). Assessment of parent-child relations included a single measure. Adolescents were asked, "Overall, you are satisfied with the relationship with your mother (father)." Answers were provided using a 5-point Likert scale, ranging from 5 (very satisfied) to 1 (very unsatisfied). Results indicated that, after controlling for the mother-adolescent relationship, the father-adolescent relationship had a separate, independent contribution to adolescents' well-being. The impact of the paternal relationship was also robust over time; changes in adolescent satisfaction within the adolescent-father relationship significantly influenced variations in children's psychological well-being approximately 6 months later.

Another study that used the National Longitudinal Study of Adolescent Health to examine the differential effects of mothers'/fathers' parenting on adolescents was conducted by Bulanda and Majumdar (2009). Adolescent self-report was used to separately assess parental

availability, parental involvement, and quality of parent-child relations for fathers and mothers. Adolescent self-esteem was measured using a six-item scale, which evaluated how adolescent's felt emotionally in the past week and their levels of agreement with a number of self-statements. Results showed that both mothers and fathers independently contribute to the self-esteem of their adolescent through involvement, quality of relationships, and availability. An interaction effect was noted with involvement and relationship quality, such that significantly higher self-esteem scores were noted when positive relationships and high parental involvement with both mother and father were present. In other words, when both parents are highly involved and have positive relationships with their children the total benefit appears to be greater than the sum of its parts.

Amato (1994) found that relationships with fathers were not as pertinent to young adults' self-esteem as their relationships with mothers. Using telephone interviews, researchers collected data regarding offsprings' psychological well-being, global happiness, life satisfaction, self-esteem, and relations with parents. Significant correlations were found between closeness to father and child happiness, life satisfaction, and psychological distress. In other words, the closer children reported being to their fathers the more happy, satisfied, and less distress they reported being. These correlations were independent of closeness to mothers. However, analyses revealed that fathers contributed little to children's self-esteem after closeness to mother was controlled for. Nevertheless, closeness to mother and father accounted for approximately 4% of children's self-esteem.

In sum, the sparse research in this area appears to indicate that mothers and fathers influence their children in separate and unique ways. However, a closer examination of this phenomenon seems warranted, especially with respect to child self-esteem. The current study

sought to add to this area of the literature by investigating the links between parent-child cohesion configurations and the self-appraisals of early adolescents. Further examination of these ties, as well as their interactions, may provide new avenues for understanding the development of adolescents' self-appraisals.

Chapter 3: Method

The current study utilized a cross-sectional research design to investigate the relationship between individual parent-child cohesion scores and children's self-concept. Analyses were controlled statistically for child sex, race, school achievement, family income, father's educational attainment, mother's educational attainment, and number of family members in the home.

Participants

Participants included 30 early adolescents, sampled from a public charter school and a private school in Southern Delaware. The demographic characteristics of the sample are provided in Table 1. Data on participants' exact chronological age was collected for 29 of the 30 participants. Ages ranged from 11.08 to 14.58 years, with a mean of 13.17 years. Most participants were White (83.3%, $n = 25$) and female (70.0%, $n = 21$), with typical grades between 90 and 100 (36.7%, $n = 11$). The majority of participants came from families that earned over $100,000 per year (60%, $n = 18$). Similarly, most participants' mothers (66.7%, $n = 20$) and fathers (56.6%, $n = 17$) attained at least a 4-year college degree. The vast majority of participants had siblings; the most common (43.3%, $n = 13$) family arrangement consisted of a mother, father, and 3 children.

Early adolescent children were specifically targeted in the current study because of the tumultuous nature of that developmental period. Early adolescence is characterized by a host of major life changes (e.g., physiological, cognitive, educational, social, etc.), which contribute to global declines in self-perceptions. During this time of continual change, maintaining close bonds with parents may be especially beneficial as compared to other developmental periods.

Instruments/Measures

The Family System Test (FAST).

The FAST is a clinical research tool that was designed to measure cohesion and hierarchy in the family and its subsystems (Gehring, 1998). To do so, it employs a 45 cm X 45 cm monochromatic square board divided into 81 squares, male/female wooden figures, and cylindrical blocks of three sizes. Participants are instructed to use the square board and other materials to portray the relationships in their family. "How close the members in your family are" (p. 22), or cohesion, is measured by the distance between family members on the board. "How much power or influence each family member typically has" (p. 22), or hierarchy, is based on how many cylindrical blocks adolescents used to elevate a given figure.

The FAST is designed for individuals as young as six years old and is considered psychometrically sound (Whitford-Stoddard, 2004). Gehring and Feldman (1988) reported that the cohesion and hierarchy dimensions at the family and subsystem level were nearly independent (r = .01 to .19). Test-retest reliability at the family level was established with a group of ninth to twelfth graders (r = .87 and .83 for cohesion and hierarchy, respectively); reliability was slightly lower at the dyad level (r = .73 and .75 for cohesion and hierarchy, respectively). A group of sixth graders displayed slightly less stability, at the family level, over a one week period (r = .63 for both cohesion and hierarchy). The Cohesion and Control subscales of the Family Environment Scale (FES) were used as external validation criteria to assess the convergent and discriminate validity; similar analyses were conducted using the FACES-III. FAST cohesion scores correlated with Cohesion on the FES (r = .49), while the FAST hierarchy scores shared a modest correlation with FES's Control scale (r = .27). These findings were echoed in comparative analyses of the FACES-III Cohesion (r = .47) and Adaptability (r = .21) subscales. Discriminant validity, using the FES and FACES-III as external validation criteria,

revealed that for adolescents, children's representations showed significant correlation coefficients between conceptually different dimensions.

The FAST consists of three parts or "representations": Typical, Ideal, and Conflict. During administration, subjects depict their family dynamics across the 3 different representations. The first is a Typical Representation. Here, subjects place their figures on the monochromatic board according to how their family "typically" (p. 22) is from day to day. The second is an Ideal Representation; subjects place their figures according to how they "wish" (p. 23) their family relations were. Finally, in the Conflict Representation, subjects assemble their figures according to how they might appear when the family is in conflict. After each representation, a specific set of follow-up questions are administered to collect qualitative information regarding the subjective meanings of representations. In the current study, participants only completed the Typical Representation portion of the FAST. Correspondingly, to reduce administration time, the follow-up interview questions for the Typical Representation were not administered.

The final version of the FAST utilizes a categorical system for classifying both cohesion and hierarchy (Gehring, 1998). These dimensions are described as "low", "medium", or "high". Thus with regard to subsystem cohesion configurations, if the figures are placed on directly adjacent squares, they are said to have "high cohesion". If two figures are placed diagonally adjacent to each other, they have "medium cohesion"; all other placements are labeled as having "low cohesion". This scoring system was designed to eliminate the purely arithmetic analyses of family representations used by earlier studies. In addition, the alteration increases clinical utility, making aspects of gestalt possible and providing a clear classification of family structures.

The current study utilized the original scoring procedure that was used to evaluate the FAST's psychometric properties and construct validity at the Stanford Center for the Study of Families, Children and Youth from 1985 to 1988 (Gehring & Feldman, 1988; Gehring & Wyler, 1986). This scoring procedure was used because it allowed for more variability in participant responses. Cohesion scores on the FAST were determined by first calculating the distance between figures on the board. The Pythagorean formula was used to establish the distances between figures on adjacent and diagonal squares. Thus, the distance between adjacent squares was scored a "1", while diagonally adjacent squares were scored a "1.4". Consequently, the largest dyadic distance score that could be achieved on the board was "11.3". Cohesion scores were then determined by subtracting distance scores from "12". The higher the cohesion score, the closer an individual feels to their family members. Mother-Child and Father-Child Cohesion Scores provided a quantitative conceptualization of the level of closeness in each parent-child dyad. The Parent-Cohesion Difference Score, which was calculated by subtracting the Mother-Child Cohesion Score from the Father-Child Cohesion Score, depicted the degree of variation in cohesion between parent-child dyads. Scores of "0" indicated that children felt just as close to their mothers as their fathers. Scores above "0" suggested that children felt closer to their fathers than their mothers, while negative scores indicated the inverse.

The hierarchy portion of the FAST was not administered. Consequently, no power scores were computed.

Piers-Harris Children's Self Concept Scale – Second Edition (Piers-Harris 2).

The Piers-Harris 2 (Piers-Harris 2; Piers & Herzberg, 2002) assesses various dimensions of children's self-concept through a yes/no answer format. It has gone through a number of alterations over the years with the latest revision occurring in 2002. The Piers-Harris 2 produces

a global composite score that is derived from six domain-specific facets of self-concept. The Total scale is a measure of general self-concept (i.e., self-esteem). The Physical Appearance and Attributes scale assesses the participant's appraisals regarding a variety of attributes, including physical appearance, leadership, and ability to communicate ideas. The Intellectual and School Status scale quantifies a child's perception of his or her abilities on intellectual and academic tasks. The Happiness and Satisfaction scale measures feelings of happiness and satisfaction with life. Items on the Freedom From Anxiety scale target feelings of anxiety and dysphoric mood. The Behavioral Adjustment scale assesses the child's admission or denial of problematic behaviors. Finally, the Popularity scale reflects the child's perception of his or her social functioning.

Internal consistency for the total composite was found to be .91, with domains ranging from .74 to .81. A number of studies have looked at test-retest reliability; scores ranged from .69 to .75. In addition, the Piers Harris-2 has established convergent validity with preexisting measures of self-concept (e.g., Coopersmith Self-Esteem Inventory, Tennessee Self Concept Scale: 2 Child Version) (Butler & Gasson, 2005).

Scoring the Piers Harris-2 begins with validity checks. Inconsistent responses are assessed through 15 matching-item pairs. The number of inconsistent responses is totaled and recorded. Response bias is evaluated by summing the number of "yes" responses throughout the measure. These scores are treated as individual scales and are compared with the normative sample. Elevated levels of inconsistent responses and/or response bias may indicate invalid results. Validity checks were conducted in the current study. No cases were significant for response bias or inconsistent responses.

Each individual test item is scored as either a "1" or a "0", depending on the participant's response. Raw factor scores are calculated by summing the scores of all relevant items (e.g., 11 items for Physical Appearance and Attributes). The Total Composite raw score is produced by summing the scores for all test items. After all raw scores are compiled, they can then be converted to T-scores. All scores were converted to T-scores for analyses. T-scores of 40 or below indicate problem areas of self-concept. T-scores ranging from 40 to 60 indicate typical levels of perceived competence. Finally, T-scores of 60 and above suggest positive self-appraisals.

Mean scores for all of the measures are included in Table 2.

Procedure

Sampling occurred in schools based on school administration's willingness to permit data collection. Classes with students in the target age range (i.e., 10 to 15 years) were then identified. Prior to student contact, parents of potential participants were provided with research information, a request for consent, as well as a brief information sheet regarding demographic variables (see Appendix A for the Parent Information Sheet).

Data collection was limited to students who were given parental permission to participate. Only young adolescent children, from ages 10-0 to 15-0, were included in the sample. In addition, only children residing with both biological parents (intact families) were included, with only one child per family participating.

During the assessment stage, participants completed the Piers-Harris 2. Students were told that they were completing a questionnaire about themselves that will be used to help the researcher understand more about how adolescents think. Children also met individually with the researcher to complete the FAST. They were informed that they were assisting the

researcher in understanding more about adolescents and their families. A modified administration procedure was utilized to specifically target individual mother-child and father-child cohesion patterns. Upon entering the session, the examiner briefly introduced the participant to the testing materials: "I would like to show you some materials we use to show relationships in a family. With this board and these figures (Examiner shows the test materials) you can show how close the members of your family are to one another. Members of the same family sometimes can show the relationships differently. I am interested in how you see your family. There are no right or wrong answers." The examiner then briefly explained the cohesion representation: "Here are male and female figures representing the members of your family. By arranging the figures on the board, you can show how close the members of your family are to each other. You can use any of the spaces on the board." The examiner then placed a pair of figures side-by-side on two adjacent squares on the board and said, "This means that these two family members have a very close relationship." The examiner then placed the same two figures on two diagonally adjacent squares and move them apart to two diagonally opposed corners of the board and said, "The further apart you place two figures, the more emotionally distant they are to each other. Placing figures on diagonally opposite corners of the board means that you think the relationship between these two family members is not close as all." Unlike the original FAST administration procedure, mother-child and father-child cohesion scores were collected separately. To do so, the examiner gave the participant a figure that corresponded with their sex as well as a female figure. The examiner then said, "I would now like you to show the relationships in your family as they usually are. Position these figures on the board to show how close you are to your mother." After the participant depicted the mother-child configuration, the board was cleared, and the female figure was switched with a male figure. The examiner then

said, “Position these figures on the board to show how close you are to your father.” Finally, the participant was given access to all the figures and told, “Now, position the figures on the board to show how close the members in your family are.” Administration of the mother-child and father-child cohesion representations was counterbalanced across participants to eliminate sequence effects. The whole family representation, however, was always administered last. The researcher was present to answer any questions the children had during the course of the assessment. The sequence of assessment completion was counter-balanced (i.e., FAST administration occurred first for 50% participants) to ensure that the sequence of assessment presentation did not confound results. Assessment scoring and data analysis were limited to students who completed both the Piers-Harris 2 and FAST.

Chapter 4: Results

A series of 21 sequential multiple regressions (3 independent variables X 7 dependent variables) were performed to determine whether the addition of parent-child cohesion variables improved prediction of children's self-concept constructs after controlling for children's typical grades and sex. Analyses were performed using SPSS (Version 22.0). Refer to Table 2 for a correlation matrix of all regression variables.

Before the analyses were conducted all data was screened for accuracy of data entry, missing data, univariate outliers, normality, and linearity. Six participants had multiple endorsements for their typical grades (e.g., both A (90-100) and B (80-89)). In these cases, the lower endorsement was always selected for data entry. In addition, 2 participants were missing endorsements for family's approximate yearly income. These missing entries were filled using the mean of all responses. Due to the majority of participants being White, race was recoded (White = 0 and non-White = 1).

In an effort to preserve statistical power, all control variables (i.e., child sex, race, typical school grades, family income, father's educational attainment, mother's educational attainment, and number of children in the family) were entered individually into a linear regression with each of the dependent variables (i.e., children's reported Total Composite self-concept t-score, Physical Appearance and Attributes t-score, Intellectual and School Status t-score, Happiness and Satisfaction t-score, Freedom From Anxiety t-score, Behavioral Adjustment t-score, and Popularity t-score). Due to the relatively small sample size, a modest significance level (i.e., .10 level) was used to determine what control variables would be included in the analysis. If the control variables did not significantly correlate at the .10 level with any of the dependent variables, they were excluded from the analysis. Ultimately, only two variables showed

significant correlations with at least one dependent variable - typical school grades and sex. Therefore, only these two variables were included in the analyses.

In assessing the regression variables, no univariate outliers (i.e., greater than 3.5 standard deviations from the means) were found. Durbin-Watson tests for each regression produced scores above 1.0, suggesting that the residuals were independent. Multicollinearity tests for all independent variables produced variance inflation factors (VIF) that did not exceed 1.4, suggesting that the variables were not highly correlated. No multivariate outliers were identified using Mahalanobis distance ($p < .001$). A regression residuals scatter plot indicated no major departure from the assumptions of normality, linearity, or homoscedasticity. This indicated that there were no significant issues with the linear regressions.

The sequential multiple regressions were conducted by entering each of the Piers-Harris composites as the dependent variable. For the independent variables, child sex and typical grades were entered into the first block. Mother-Child Cohesion Score, Father-Child Cohesion Score, or Parent-Child Difference Score was then added into the second block. This process was repeated until all Piers-Harris scales were regressed with each of the cohesion variables (i.e., Mother-Child Cohesion, Father-Child Cohesion, and Parent-Child Difference Score).

Control Variables

In the first block, the control variables did have a significant impact on five scales from the Piers-Harris 2 (see Table 3 for results of regression analyses). However, when inspected individually, typical grades appeared to exert the most impact on the dependent variables; sex never significantly contributed to any of the regression models. The control variables significantly related to the Piers-Harris 2 Total Composite Score, $F(2, 27) = 9.339$, $p < .001$. Only typical grades significantly contributed to the paradigm ($\beta = .667$, $p < .001$). This trend

was also observed for the Piers-Harris 2 Behavioral Adjustment scale, $F(2, 27) = 6.656$, $p < .01$. Typical grades significantly contributed to this model ($\beta = .604$, $p < .01$). The first block of the regression also significantly impacted the Freedom From Anxiety scale, $F(2, 27) = 5.672$, $p < .01$. Again, typical grades significantly contributed ($\beta = .600$, $p < .01$). Control variables significantly influenced the Intellectual and School Status scale, $F(2, 27) = 6.487$, $p < .01$. Typical grades significantly contributed to the model ($\beta = .545$, $p < .01$). Finally, the first block of variables significantly related to the Happiness and Satisfaction scale, $F(2, 27) = 3.553$, $p < .05$. Here, neither typical grades ($\beta = .335$) nor sex ($\beta = -.195$) produced significant results individually.

Cohesion Variables

A paired-samples t-test was conducted to compare participants' reports of mother-child and father-child cohesion. No significant differences were noted between mother-child ($M = 10.46$, $SD = .86$) and father-child cohesion scores ($M = 10.52$, $SD = .49$); $t(29) = -.33$, $p = .743$.

To determine if mother-child cohesion levels related to children's self-concept differently than father-child cohesions levels, Mother-Child Cohesion Scores and Father-Child Cohesion Scores were entered individually into Block 2, allowing an estimation of the variance they added to the regression equation above the previous variables. Parent-Cohesion Difference Scores were entered in a similar fashion, allowing the researcher to ascertain if differences in closeness between parent-child relationships predicted changes in children's self-concept. Analyses revealed that Mother-Child Cohesion Scores and Parent-Cohesion Difference Scores did not significantly contribute to any of the 14 regressions (i.e., 7 for Mother-Child Cohesion Scores, 7 for Parent-Child Difference Scores) into which they were entered. However, Father-Child Cohesion Scores did significantly contribute to the Behavioral Adjustment scale as well as the

Intellectual and School Status scale. For the Behavioral Adjustment regression, Father-Child Cohesion Scores produced a ΔR^2 of .209, which was statistically significant, $\Delta F(1, 26) = 11.780$, $p < .01$. The total variance accounted for with all 3 variables (i.e., sex, typical grades, Father-Child Cohesion Scores) in the regression model was 53.9%, $F(3, 29) = 10.136$, $p < .001$. This finding remained consistent even when mother-child cohesion was controlled for. To acquire an estimate of observed power, the analysis was also completed as a two-way ANCOVA with Behavior Adjustment as the dependent variable, child sex and Father-Child Cohesion Scores as independent variables, and typical grades as a covariate. Results suggested observed power of .714 for Father-Child Cohesion. The results indicate that participants who reported feeling closer to their fathers had higher scores on the Behavioral Adjustment scale. With respect to Intellectual and School Status, Father-Child Cohesion Scores resulted in a ΔR^2 of .104, which was statistically significant, $\Delta F(1, 26) = 4.733$, $p < .05$. The total variance accounted for with all 3 variables in the regression model was 42.9%, $F(3, 29) = 6.5$, $p < .01$. This finding remained consistent even when mother-child cohesion was entered into the regression as a control variable. Power analyses using the two-way ANCOVA procedure produced observed power of .483 for Father-Child Cohesion. Again, positive beta and partial correlations were noted for Father-Child Cohesion Scores, suggesting that participants who reported feeling closer to their fathers also rated themselves higher on the Intellectual and School Status scale.

Chapter 5: Discussion

The current study sought to further explore the relationships early adolescents have with each of their parents and how those bonds may influence their self-concept. Results indicated that among all the variables assessed (i.e., child's sex, race, school achievement, family income, father's educational attainment, mother's educational attainment, number of siblings, father-child cohesion, mother-child cohesion, parent-cohesion difference score), adolescent's typical school grades exerted the most control over how they felt about themselves in various domains. Children with better school grades reported higher levels of overall self-esteem, fewer issues with problematic behavior, less anxiety and dysphoric mood, and better intellectual and academic ability. With respect to relational variables, only feelings of closeness between adolescents and their fathers were significantly linked to aspects of self-concept. Children who felt closer to their fathers reported better behavioral adjustment and intellectual status.

The differential effects of father-child and mother-child relationships on self-esteem have produced mixed results in the literature. The results of this current exploratory study lend credence to the assertion that mothers and fathers contribute differentially to adolescents' self-esteem (also seen in Bulanda & Majumdar, 2009; Videon, 2005).

Mother-child cohesion did not significantly predict any measures of adolescent self-concept, despite participants reporting similar levels of closeness in their relationships with both parents. A few other studies have found that the father-child relationship is the most salient factor in determining how children feel about themselves. For example, McCurdy and Scherman (1996) found college students' self-esteem was associated with attachment to fathers and not to mothers. Nevertheless, research generally suggests that the quality of the mother-child relationship is a contributing factor to various aspects of self-concept (e.g., social self-concept)

or general self-esteem (Bulanda & Majumdar, 2009; Videon, 2005; Wentzel & Feldman, 1996). For example, Amato (1994) found the degree of closeness between children and their mothers better predicted self-esteem than closeness to fathers. It should be noted that many of these studies measured "closeness" in different ways (i.e., using distinct operational definitions and collection methods). As such, discrepancies in findings may be attributed to data collection methods. Nevertheless, the fact that such findings were not corroborated in the current study is likely, at least partially, explained by the small sample size. A number of small to moderate effect sizes were observed between mother-child cohesion scores and specific dimensions of self-concept (i.e., Total-Self Concept, Behavioral Adjustment, Popularity, and Physical Appearance and Attributes). Although these effects were not statistically significant, with more cases, these effect sizes may have approached significance. The variability of participant responses may have also played a role. Standard error coefficients for the regressions were consistently higher for the father-child cohesion type as compared to the mother-child cohesion type. This suggests that there was less variability in children's reports of maternal cohesion, which, ultimately, would make it more difficult to find significant results. Another possible explanation is that confounding variables, specific to this sample, may have skewed the results. For example, parental availability, or how often children physically see each of their parents, may be one such factor. Family demographic variables collected for this study indicate 56.6 percent of participants' fathers received a bachelor's or graduate degree compared to 66.7 percent of mothers. This is consistent with current trends in changing gender roles; mothers are more likely than ever to pursue endeavors outside of their traditional roles, such as operating as the primary breadwinner. Such changes may alter family functioning, requiring fathers to be more involved than they are when mothers do not work.

Similarly, Parent-Cohesion Difference scores, or the equity in cohesion trends between parents, were found to be statistically unrelated to all dimensions of self-concept. Bulanda and Majumdar (2009) found a small but significant interaction effect between maternal and paternal relationship quality and adolescent self-esteem. When adolescents had strong relationships with both their mother and father, self-esteem increased by a factor greater than the contributions attributed to each parent individually. Since this interaction effect was described as very small, it is unlikely the current study could detect such an effect with its sample size. In addition, the Parent-Cohesion Difference score only quantified the actual difference between mother-child and father-child cohesion scores. In other words, a child reporting very close relationships to both her mother and father would receive a similar score to a child that perceived both her parental relationships to be emotionally distant. Overall, descriptive statistics indicated that there was very little variability between children's perceptions of closeness with their mothers and fathers. This may be attributed to the fact that all participants were sampled from intact families, where both biological parents resided in the home. These family configurations offer the most promise for close parental bonds since both caregivers are readily available. Thus, variability in parent-child cohesion scores may have been artificially low due to the exclusion of other family types (e.g., single-parent families).

Father-Child Cohesion

The father-child relationship emerged as a significant, positive predictor of specific adolescent self-appraisals. Just as Videon (2005) observed, this trend remained consistent even after controlling for the mother-child relationship. With respect to the current sample, students who felt closer to their fathers perceived themselves as better behaved and more capable of complying with rules and expectations at home and at school; closeness with fathers accounted

for approximately 20.9% of the variance in the regression model. This suggests that fatherly bonds may serve as a protective factor against externalizing behavior. The exact mechanism behind this finding is unknown, however other researchers have observed similar trends. Day and Padilla-Walker (2009) also found that father connectedness and involvement were negatively related to adolescents' internalizing and externalizing behaviors. It is possible that fathers who are actively involved in their children's lives are more likely to take on roles that directly influence behavioral outcomes (e.g., disciplinarian) than their female counterparts. Or perhaps externalizing behaviors may be an effective way for children to secure adult, male attention. Children with close paternal ties likely already receive high levels of male attention from their fathers, making them less motivated to engage in negative behavior.

Father-child cohesion was also positively correlated with participants' responses on the Intellectual and School Status scale. That is, students who reported feeling closer to their fathers expressed greater confidence in their general intellectual abilities and in their performance on specific academic tasks (e.g., reading, responding to teacher queries, and presenting an oral report to their class). This accounted for 10.4% of the variance in the scale's scores. Although it is curious that closeness with father, but not mother, would predict self-appraisals of intelligence, other research has produced analogous findings. Smith (1990) found that academic self-concepts are lower among adolescents in single-mother families, where the father had departed, compared to intact families. Similarly, in another study, for 8 to 12-year-olds, perceived attachment to father was found to be the only significant relational predictor of both academic self-concept and grade point average in language mastery (Bacro, 2012). Attentive fathers may be more likely to take an active role in their children's academic endeavors. Similarly, children who feel close to

their fathers would likely utilize them as a resource when preparing for tests or completing schoolwork at home. Ultimately, this could foster greater intellectual confidence.

Linear Trends

The results of the current study lend support to the linear hypothesis, which characterizes cohesion as a purely beneficial relational factor, as generally mother-child and father-child cohesion were positively correlated with various dimensions of adolescent self-concept. There are many possible explanations for this. The first, and perhaps most salient, was the way cohesion was defined in the current study. Cohesion was conceptualized in a simple, beneficial manner, similar to the definition offered by Barber and Buehler (1996); participants were asked to depict "how close" they felt to each of their parents. In this way, factors associated with enmeshment (e.g., controlling or constraining interactions) were not directly assessed. Another explanation might be that advocates of the curvilinear hypothesis are correct in theorizing enmeshed relationships are characterized by extreme closeness between family subsystems. However, perhaps the problem in quantifiably confirming this assertion is that true enmeshed relationships are quite rare. As in the current study, many participants with positive self-concepts depicted their parental relationships as extremely close. As the number of participants in a sample increases, it is possible that the influence of enmeshed subsystems are masked by larger numbers of appropriate subsystem relationships that are also quite cohesive. Ultimately, it seems more likely that enmeshment involves more than just closeness between subsystems. Enmeshed relationships foster dependency and limit one's ability to experience personal autonomy (Minuchin, 1974). In this way, perhaps other factors, in combination with extreme cohesion, are necessary to foster enmeshment. One such factor may be power. Power or hierarchy refers to the amount of influence exerted by one subsystem member over another

(Moos & Moos, 1974). Cohesive parent-child dyads that involve an overly powerful, controlling parent would likely restrict a child's ability to establish personal independence. Unfortunately, although the FAST does measure hierarchy dimensions of family subsystems, only parent-child cohesion patterns were targeted in the current study.

Limitations and Future Research

Perhaps the biggest limitation of the current study is the small sample size. The limited number of participants significantly inhibited the researcher's ability to detect medium and small effect sizes. Consequently, it is quite possible that mother-child cohesion patterns and differences between mother/father-cohesion configurations are linked with adolescents' self-appraisals, but these trends could not be detected given the limited number of cases. To that end, the addition of many cohesion variables (i.e., for Mother-Child cohesion: Total-Self Concept, Behavioral Adjustment, Popularity, and Physical Appearance and Attributes; for Father-Child cohesion: Happiness and Satisfaction; for Parent-Cohesion Difference: Intellectual and School Status and Happiness and Satisfaction) to the regression models produced large betas (i.e., .12 or higher) that were not statistically significant. This suggests that the analyses lacked sufficient power to distinguish if these effect sizes were significant. The statistically significant findings, specifically the relationships between father-child cohesion scores and participants' reports of behavioral adjustment and intellectual status, also require more careful consideration. In these instances the *p* value associated with the significant findings suggests that it is very unlikely that a Type I error (i.e., a false negative) will be made. However, the chances of making a Type II error (i.e., false positive) are increased. Given that a limited number of participants were part of the analysis, the effect size can give an indication of the probability of making a Type II error. As such, more confidence can be placed in the finding that father-child cohesion is significantly

linked with perceptions of behavioral adjustment than to perceptions of intellectual and school status.

Another major limitation is the lack of diversity in the sample. The early adolescents who participated were predominantly high achieving, white females from families with high socioeconomic status. Sampling only took place in two schools in the state of Delaware – a public charter school and a private school. In addition, only children from intact (i.e., residing with both biological parents) families were included in the study. The uniformity of participants should preclude generalization to the broader population.

Other limitations are linked with data collection. The current study utilized a cross-sectional research design. As such, it is impossible to determine causality when data is collected from participants at one specific point in time. In addition, only one item was used to quantify the parent-child cohesion for mothers and fathers. The examiner prompted participants to show "how close" they felt to each of their parents using a modified version of the FAST. Using a single item as an assessment raises issues about the reliability of such a measure. Gehring and Feldman (1988) reported that test-retest reliability was lower at the dyad level (r = .73) than the family level (r = .87). In this way, it appears that perceptions of closeness to kin are less stable when assessed individually, than when the entire family system is examined. Similarly, participants completed all research assessments one-on-one with the same male examiner. As such, participants may have had idiosyncratic reactions to the examiner. The FAST does not have any formal validity checks; however, validity measures on the Piers-Harris 2 did not indicate any such issues.

Replication of the current study with a larger sample may provide more meaningful results. The relationship between father-child cohesion patterns and specific aspects of self-

concept (i.e., behavioral adjustment, intellectual status) are worth further exploration. Recruiting additional subjects would be essential in bolstering the findings already made. Furthermore, they may reveal similar trends for mothers, or uncover interactions between particular parent-child cohesion configurations.

Future researchers would be wise to sample from more diverse populations. Collecting data from different family types (e.g., single-parent, blended, and other nontraditional arrangements) would also likely increase the variability in responses. This may make finding significant results easier and provide valuable insights into the influence mothers and fathers have on their children's functioning. There is likely a wealth of information to be collected regarding the parent-child cohesion patterns of different cultural groups (e.g., ethnic, SES, religious) as well. By examining diverse groups, researchers may be able to isolate important aspects of parent-child relationships that foster healthy child development. Expanding the age of participants would also provide interesting data. It is very likely that the cohesion trends observed during early adolescence are not static; in fact, they may be highly influenced by processes that began as early as birth. Tracking longitudinal changes in parent-child cohesion trends, and their corresponding influences in children's self-concept, would provide a broader perspective. In addition, researchers should explore other constructs, aside from cohesion, that may foster enmeshment. In general, the current study observed linear trends between parent-child cohesion and adolescent self-concept. This suggests that cohesion, as it was defined in this study, is a protective factor. Assessment of relationship power/hierarchy may prove a more fruitful endeavor; extreme power imbalances, especially in close relationships, could foster constraining interactions that would inhibit system members from experiencing personal growth and autonomy.

Implications

The current study adds to the breadth of literature in a variety of areas of research, most notably the various facets of adolescent self-concept and the influence of parent-child relational variables. Consequently, the results may prove useful in refining assessment in these areas and planning research endeavors. For example, future research could benefit from using consistent operational definitions, especially in relation to family process variables (e.g., cohesion). Ultimately, this may facilitate collaboration between researchers and practitioners, improving intervention efforts.

The first avenue of intervention and prevention would be education. Communicating the importance of the father-child relationship, and its ties to various aspects of child functioning, could be valuable to prospective parents as well as those who already have children. This information could be integrated into parenting classes and family enrichment programs with the hope that parents would alter their behavior accordingly to optimize child outcomes.

The current study may also be useful to schools and other agencies that service children who do not have close ties to their fathers. Low father-cohesion could occur for a variety of reasons including relocation, divorce, neglect, substance abuse, or death. This study's findings indicate that children in such circumstances may be prone to perceptions of intellectual inadequacy as well as behavioral difficulties. These children may be buffered from such negative outcomes through creative interventions targeted at reactivating the father's involvement and/or providing an involved father figure. For example, children in low father-child cohesion paradigms may benefit, more than their peers, from having a caring male teacher or therapist. Similarly, these children may be good candidates for youth mentor organizations, where they could be paired with a male role model. Other male family members (e.g., older

brothers, uncles, grandfathers) may be encouraged to take a more active role in the lives of children who do not have a close relationship with their father. It should be noted that these intervention efforts may be hindered by the ease with which at-risk youth could be identified, availability of pertinent resources, and family members' willingness to change.

Summary

This cross-sectional research study explored the relationship of parent-child relational variables (i.e., mother-child cohesion, father-child cohesion, and parent-cohesion difference) with early adolescents' self-perceptions in various domains. After controlling for child sex and typical school grades, data revealed no significant links between mother-child cohesion patterns and any measure of self-concept. In addition, no interaction effects between mother-child and father-child cohesion configurations predicted reliable changes in participants' self-appraisals. Father-child cohesion scores significantly predicted adolescents' endorsements on the Behavioral Adjustment, as well as the Intellectual and School Status scales of the Piers Harris 2, with the strongest relationship appearing between father-child cohesion and Behavioral Adjustment. This suggests that children who report feeling closer to their fathers also endorsed items reflecting less problematic behavior and more intellectual / academic competence. Results underscore the importance of fostering closeness between fathers and their children.

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Table 1

Frequencies and Percentages of Demographic Variables

Variable	Frequency	Percentage
Sex		
Female	21	70.0
Male	9	30.0
Race		
White	25	83.3
Spanish / Hispanic / Latino	4	13.3
Native Hawaiian / Pacific Islander	1	3.3
Child's Typical Grades		
A (90 – 100)	11	36.7
B (80 – 89)	9	30.0
C (70 - 79)	4	13.3
Multiple Entries	6	20.0
Family's Approximate Yearly Income		
0 – $20,000	1	3.3
$40,000 – $60,000	3	10.0
$60,000 - $80,000	2	6.7
$80,000 - $100,000	4	13.3
$100,000 - $120,000	3	10.0
$120,000 - $140,000	3	10.0
$140,000 - $160,000	2	6.7
$160,000 - $180,000	4	13.3
Over $200,000	6	20.0
Missing Entries	2	6.7
Father's Level of Education		
Less than high school education	2	6.7
Some college coursework / no degree	9	30.0
High school education / equivalency	0	0
Associate's degree / 2 year college	2	6.7
Bachelor's degree / 4 year college	7	23.3
Graduate Degree	10	33.3

Variable	Frequency	Percentage
Mother's Level of Education		
Less than high school education	2	6.7
High school education / equivalency	2	6.7
Some college coursework / no degree	4	13.3
Associate's degree / 2 year college	2	6.7
Bachelor's degree / 4 year college	12	40.0
Graduate Degree	8	26.7
Number of Children in the Family*		
1	2	6.7
2	12	40.0
3	13	43.3
4	2	6.7
5	1	3.3

*mean = 2.60, SD = .855

Table 2

Pearson Correlation Coefficients, Means, and Standard Deviations for all Regression Variables

Measure	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. MCC	10.46	.861	-											
2. FCC	10.52	.499	.012	-	.									
3. PCD	.06	.991	-.864**	.494**	-									
4. TOT	54.67	8.087	.233	.043	-.181	-								
5. BEH	54.60	6.921	.300	.295	-.112	.750**	-							
6. INT	52.10	8.256	.098	.174	.003	.795**	.666**	-						
7. PHY	55.00	8.213	.263	.045	-.206	.671**	.490**	.494**	-					
8. FRE	51.87	7.714	.049	-.189	-.138	.665**	.311	.358	.196	-				
9. POP	53.23	8.007	.215	-.050	-.212	.604**	.212	.240	.416*	.466**	-			
10. HAP	55.53	5.329	.023	.172	.067	.520**	.481**	.491**	.511**	.153	.162	-		
11. TG	4.23	.678	.187	-.248	-.288	.636**	.571**	.568**	.315	.441*	.262	.422*	-	
12. Sex	.30	.466	-.167	.047	.169	-.229	-.197	-.295	-.351	.088	-.121	-.344	-.447*	-

Note. MCC = Mother-Child Cohesion Score; FCC = Father-Child Cohesion Score; PCD = Parent-Cohesion Difference Score; TOT = Total Self-Concept T-Score; BEH = Behavioral Adjustment Self-Concept T-Score; INT = Intellectual and School Status Self-Concept T-Score; PHY = Physical Appearance and Attributes Self-Concept T-Score; FRE = Freedom From Anxiety Self-Concept T-Score; POP = Popularity Self-Concept T-Score; HAP = Happiness and Satisfaction Self-Concept T-Score; TG = Typical Grades
*$p < .05$ (two-tailed) **$p < .01$ (two-tailed)

Table 3

Sequential Multiple Regression Analyses Predicting Dimensions of Self-Concept from Mother-Child, Father-Child, and Parent-Difference Cohesion Scores

					Cohesion Type								
		Block 1			Mother-Child - Block 2			Father-Child - Block 2			Parent Difference - Block 2		
DV	IV	β	SE	ΔR^2	β	SE	ΔR^2	β	SE	ΔR^2	β	SE	ΔR^2
TOT		-	-	.41***	-	-	.02	-	-	.05	-	-	.00
	Sex	.07	2.87	-	.08	2.90	-	.09	2.82	-	.07	2.93	-
	TG	.67***	1.97	-	.65***	2.00	-	.73***	2.00	-	.67***	2.07	-
	CT	-	-	-	.12	1.43	-	.22	2.43	-	.00	1.29	-
BEH		-	-	.33**	-	-	.04	-	-	.21**	-	-	.00
	Sex	.07	2.61	-	.10	2.59	-	.11	2.21	-	.07	2.66	-
	TG	.60**	1.80	-	.57**	1.79	-	.74***	1.57	-	.62**	1.88	-
	CT	-	-	-	.21	1.28	-	.47**	1.91	-	.05	1.17	-
POP		-	-	.07	-	-	.03	-	-	.00	-	-	.02
	Sex	-.01	3.57	-	.01	3.59	-	-.00	3.64	-	.00	3.60	-
	TG	.26	2.45	-	.24	2.48	-	.27	2.58	-	.22	2.54	-
	CT	-	-	-	.17	1.77	-	.02	3.14	-	-.15	1.58	-
FRE		-	-	.30**	-	-	.00	-	-	.00	-	-	.00
	Sex	.36	2.99	-	.36	3.06	-	.35	3.05	-	.36	3.05	-
	TG	.60**	2.05	-	.60**	2.11	-	.58**	2.16	-	.59**	2.15	-
	CT	-	-	-	-.00	1.51	-	-.06	2.62	-	-.03	1.34	-

					Cohesion Type								
		Block 1			Mother-Child - Block 2			Father-Child - Block 2			Parent Difference - Block 2		
DV	IV	β	SE	ΔR^2	β	SE	ΔR^2	β	SE	ΔR^2	β	SE	ΔR^2
PHY		-	-	.16	-	-	.04	-	-	.01	-	-	.01
	Sex	-.26	3.49	-	-.24	3.49	-	-.25	3.54	-	-.28	3.53	-
	TG	.20	2.39	-	.17	2.41	-	.23	2.50	-	.17	2.49	-
	CT	-	-	-	.19	1.72	-	.11	3.04	-	-.11	1.55	-
INT		-	-	.33**	-	-	.00	-	-	.10*	-	-	.03
	Sex	-.05	3.13	-	-.05	3.21	-	-.03	2.94	-	-.06	3.12	-
	TG	.55**	2.15	-	.55**	2.21	-	.64***	2.08	-	.59**	2.21	-
	CT	-	-	-	-.01	1.58	-	.33*	2.53	-	.18	1.37	-
HAP		-	-	.21*	-	-	.00	-	-	.08	-	-	.04
	Sex	-.20	2.19	-	-.20	2.23	-	-.17	2.13	-	-.21	2.17	-
	TG	.34	1.50	-	.35	1.54	-	.42*	1.51	-	.39	1.54	-
	CT	-	-	-	-.08	1.10	-	.28	1.83	-	.21	.95	-

Note. DV = Dependent Variable; IV = Independent Variable; SE = Standard Error; TOT = Total Self-Concept; BEH = Behavioral Adjustment Self-Concept; INT = Intellectual and School Status Self-Concept; PHY = Physical Appearance and Attributes Self-Concept; FRE = Freedom From Anxiety Self-Concept; POP = Popularity Self-Concept; HAP = Happiness and Satisfaction Self-Concept; TG = Typical Grades; CT = Cohesion Type

*$p < .05$. **$p < .01$. ***$p < .001$

Appendix A
Parent Information Sheet

Please circle your child's sex:

1. Male
2. Female

Please circle your child's race:

1. Spanish / Hispanic / Latino
2. White
3. Black / African American
4. American Indian / Alaskan Native
5. Asian
6. Native Hawaiian / Pacific Islander
7. Other _____

Please circle your child's typical grades in school:

1. A (90 – 100)
2. B (80 – 89)
3. C (70 – 79)
4. D (60 – 69)
5. F and below (0 – 59)

Please circle your family's approximate yearly income:

1. 0 – $20,000
2. $20,000 - $40,000
3. $40,000 - $60,000
4. $60,000 - $80,000

5. $80,000 - $100,000
6. $100,000 - $120,000
7. $120,000 - $140,000
8. $140,000 - $160,000
9. $160,000 - $180,000
10. $180,000 - $200,000
11. Over $200,000

Please circle father's level of education:

1. Less than high school education
2. High school education/equivalency
3. Some college coursework/no degree
4. Associate's degree/2 year college
5. Bachelor's degree/4 year college
6. Graduate degree

Please circle mother's level of education:

1. Less than high school education
2. High school education/equivalency
3. Some college coursework/no degree
4. Associate's degree/2 year college
5. Bachelor's degree/4 year college
6. Graduate degree

Please circle your family type:

1. Two parent intact (both biological mother and father reside in the home)

2. Blended-family, headed by father (biological father and their significant other reside in the home)
3. Blended-family, headed by mother (biological mother and their significant other reside in the home)
4. Single-parent, headed by mother (only biological mother resides in the home)
5. Single-parent, headed by father (only biological father resides in the home)
6. Other _____

Please indicate the number of children in the family: _____