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Dimensions of Protective Parent-Adolescent Dyads as Defined by Mexican
American Sons

by

Clare M. Dudzinski, B.A., B.S.W

MSW Clinical Research Paper

Presented to the Faculty of the
School of Social Work
St. Catherine University and the University of St. Thomas
St. Paul, Minnesota
in Partial Fulfillment of the Requirements for the Degree of
Master of Social Work

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The Clinical Research Project is a graduation requirement for MSW students at St. Catherine University/University of St. Thomas School of Social Work in St. Paul, Minnesota and is conducted within a nine-month timeframe to demonstrate facility with basic social research methods. Students must independently conceptualize a research problem, formulate a research design that is approved by a research committee and the University Institutional Review Board, implement the project, and publicly present the findings of the study. This project is neither a Master's thesis nor a dissertation.

Abstract

The unique relationship between parent and adolescent requires clinical attention as a The unique relationship between parent and adolescent requires clinical attention as a means of promoting positive mental, emotional, and behavioral outcomes for adolescents. The dynamic identity and growing presence of the Mexican American male adolescent in American society add multiple layers to this already complex relationship. The purpose of this project was to explore features and definitions of closeness and care in parent-adolescent dyads to understand how Mexican American male adolescents build positive relationships with their resident parents. In this secondary data analysis, features of closeness and care were drawn from Wave I, Stage 2 of the National Longitudinal Study of Adolescent Health (Add Health), a longitudinal study following a nationally representative sample of adolescents from 1994 to 2008. Data were analyzed using SPSS software. The findings indicated similar features of closeness and care in relationships with both resident parents. Features associated with communication and warmth or emotional support corresponded most significantly with higher levels of closeness and care. These trends offer a foundation for fostering positive relationships between Mexican American male adolescents and the formative adult figures in their lives. Likewise, these results present important information about the process of developing a therapeutic alliance with this client population. In moving forward, this study points to the need for a more culturally specific, modernized, and qualitative investigation of these definitions and the implications of parental and adolescent gender.

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Introduction

The Hispanic and Latino populations in the United States are striking in their expanding presence and youth. From 2000 to 2010, these groups accounted for more than half of the nation's population growth, with individuals of Mexican origin constituting nearly 75% of this increase (Ennis, Rios-Vargas, & Albert, 2011). Such numbers confirm this group's identity as the largest Hispanic or Latino subpopulation in the nation (Motel, 2012). Youth are a critical driving force in this expansion; 2010 figures reveal that one-quarter of individuals under age 18 and one fifth of individuals between the ages of 10 and 20 are Hispanic or Latino (Kurtzleben, 2010). Given these statistics, Mexican American adolescents represent an undeniable force in the nation's social and cultural landscape, and more information is necessary to ensure quality service provision to this expanding group.

In preserving the psychological and behavioral health of any client base, it is critically important to draw on innate strengths and systems that protect against negative outcomes (referred to in this research as *protective factors/qualities* or *protectiveness*). To appropriately address this population of interest, particular attention must be paid to the protective potential of parent-adolescent dyads, with careful consideration given to (a) the conflictive potential and reparative potential of parent-son relationships in particular and (b) the unique constructions of family and gender in Mexican American culture. Grounded in these core considerations, this study will examine meanings of closeness and care as defined by male Mexican American adolescents; key features of close and caring parent-son dyads and associated emotional health outcomes will be investigated.

Research consistently demonstrates the protective quality of non-conflictive parent-adolescent relationships in promoting a wide array of positive mental, emotional, and behavioral health outcomes for youth (Ayon, Marsiglia, & Bermudez-Parsai, 2010; Branstetter & Cottrell, 2008; Ge, Best, Conger & Simons, 1996; Kuhlberg, Pena, & Zayas, 2010; McDonald et al., 2005;

Smokowski, Bacallao, & Buchanan, 2009). As an adolescent's psychosocial risk increases, so too does the potential benefit of the parent-adolescent relationship (Bogenschneider & Pallock, 2008). Thus, parent-adolescent bonds reveal their value as a central component of service to both parties in this dyad as well as the larger family unit.

Studies of parent-son relationships reveal the particular need for attention to the mother-son and father-son dyads. Research shows that male adolescents experience more conflict in parent-adolescent relationships and more detrimental outcomes as a result of parenting styles than female adolescents (Crockett, Brown, Russell, & Shen, 2007; McGue, Elkins, Walden, & Iacono, 2005; McKinney & Renk, 2011). Furthermore, positive parent-son dyads appear to offer more lasting and reparative protection for sons, reinforcing the importance of strengthening these relationships (Crean, 2008). Finally, given cultural institutions of *respeto* (respect for roles and hierarchy), *familismo* (precedence of family needs over individual needs), and *machismo* (masculinity as a highly valued trait in males), parent-son dynamics take on unique meaning in Mexican American families that contribute to their inherent protective potential.

Although much research exists confirming the importance of and protection offered by parent-adolescent relationships, this study will explore concrete factors that contribute to, or detract from, these positive relationships.

Using data from the first wave of the National Longitudinal Study of Adolescent Health (Add Health), this research effort will look at dimensions of closeness and care between Mexican American adolescent sons and their parents. The study will answer the twin research questions: (1) *What factors influence impressions of parent-adolescent closeness among Mexican American male adolescents?* and (2) *What factors contribute to Mexican American male adolescents' perceptions of parental degree of care?* Factors to be studied include (a) time spent together, including quantity and type of shared activities, (b) parent-adolescent communication, (c) parental investment in adolescents' goals and academics, (d) degree of parental warmth and

emotional support, and (e) extent of parenting monitoring. Relationships between these indicators of closeness and care and resulting adolescent emotional health outcomes will also be examined in response to the culminating research question: (3) *Which elements of non-conflictive parent-adolescent relationships (as identified in research questions #1 and #2) contribute most strongly to positive emotional outcomes for male Mexican American youth?* This question will be addressed using Add Health scales measuring feelings, self-esteem, and mental health outcomes.

Literature Review

Positive parent-adolescent relationships have a significant impact on the social, emotional, and behavioral health of adolescents. The defining features and outcomes of parent-son relationships make them particularly critical for the healthy development of male adolescents. However, these dyads tend to be less well understood than those of parents and daughters, especially in the realm of emotional health. Moreover, unique Mexican American cultural expectations contribute an additional layer of complexity to these parent-son bonds. This literature review will synthesize pre-existing data on these topics to respond to the aforementioned research questions. It will examine (a) the benefits of positive parent-adolescent relationships, (b) the specific features of those relationships, (c) distinguishing trends in parent-adolescent son relationships, (d) implications of culture, and (e) implications of parental gender.

Benefits of Parent-Adolescent Relationships

Positive parent-adolescent relationships can have significant protective qualities for adolescents, while conflictive relationships tend to have the opposite effect (Branstetter & Cottrell; Crean, 2008; Dumka, Gonzales, Bonds, & Millsap, 2009; Ge et al., 1996; Kuhlberg et al., 2010; McKinney & Renk, 2011; Smokowski et al., 2009). Research finds that positive parent-adolescent relationships can have a protective impact by increasing measures of self-worth and decreasing internalizing symptoms, or behaviors that are focused inward on the individual;

internalizing symptoms include such issues as depression, anxiety, worry, fear, self-injury, and social isolation (Barber & Buehler, 1996; Crean, 2008; Kuhlberg et al., 2010; McKinney & Renk, 2011; Smokowski et al., 2009). Positive parent-adolescent relationships can likewise reduce depressive symptoms and suicidality (Ge et al., 1996; Kuhlberg et al., 2010).

Studies also indicate that positive parent-adolescent relationships can influence externalizing symptoms, those that are directed outward and affect others in an individual's environment (Barber & Buehler, 1996; Crean, 2008; McKinney & Renk, 2001). Branstetter and Cottrell (2008) note that positive parent-adolescent relationships tend to relate to lower truancy rates, decreased substance use, and enhanced positive relationships with peers. Positive parent-adolescent relationships can also support strong academic outcomes (Branstetter & Cottrell, 2008; Dumka et al., 2009) and diminish conduct problems (Ge et al., 1996). Finally, Bogenschneider and Pallock (2008) found a clear association between parental responsiveness to adolescents and adolescent responsibility, including completion of household chores, good judgment in social and financial matters, and consistent follow-through on stated goals and promises.

Elements of Positive Parent-Adolescent Relationships

A wide array of relationship features contributes to the aforementioned benefits of parent-adolescent relationships. Both expressive parental qualities (Bogenschneider & Pallock, 2008; Fletcher, Steinberg, & Williams-Wheeler, 2004; Ge et al., 1996) and instrumental parenting styles (Bogenschneider & Pallock, 2008; Crockett et al., 2007; Fletcher et al., 2004; Ge et al., 1996; McKinney & Renk, 2011; Repinski & Zook, 2005) play a role in the development of either protective or damaging outcomes. Expressive qualities are primarily emotions-centered, while instrumental qualities refer more to active, duty-based types of support. Within these two categories, features can be sorted into five general groupings, as outlined below.

Time spent together. Previous research reveals close links between good parenting and instrumental (activity-centered) support, resulting in positive parent-adolescent relationships

(Bogenschneider & Pallock, 2008; Crockett et al., 2007). Despite the value placed on communication and emotional support, Mexican American male adolescents in particular focused on time- and action-based indicators of care (Crockett et al., 2007). Respondents noted that they knew their parents cared about them because of what they did for them (instrumental caring activities), such as cooking, cleaning, and taking care of them when they were sick. Moreover, activities done in tandem carried significant weight. Sons in particular made note of shared activities as a sign of care; this finding was particularly strong for the father-son dyad.

Communication. Brody and colleagues (2005) identified open communication as an indicator of healthy parent-adolescent relationships. Likewise, interviews with Mexican American adolescents revealed that open communication – defined broadly by these adolescents as the ability to talk about “what’s happening in their lives” – is a critical element of positive parent-adolescent relationships (Crockett et al., 2007, p. 649).

Goals and academics. The themes of time spent together and communication converge around this third fact of positive parent-adolescent relationships. Crockett and colleagues (2007) interviewed Mexican American adolescents regarding components of positive parent-child relationships. Male interviewees in this study highlighted the importance of parental interest and supervision regarding the adolescents’ academic pursuits. Mexican American male respondents in particular saw this focus on their schooling – specifically asking about performance and grades – as indicative of paternal care.

Warmth and emotional support. Parental warmth is also a key element of parent-adolescent relationships that effectively addresses both internalizing symptoms, such as depression or anxiety, and externalizing symptoms, such as conduct issues and substance use (Fletcher et al., 2004; Ge et al., 1996). Emotional support, including responsiveness, acceptance, and parents expressing interest in their adolescent children’s lives, is likewise a key theme in previous research (Bogenschneider & Pallock, 2008; Brody et al., 2005; Crockett et al., 2007;

Fletcher et al., 2004; Repinski & Zook, 2005). Repinski and Zook (2005) also looked at close relationships in the context of emotional tone, defined by “strong, positive emotions” (p. 98); they uncovered a connection between emotional tone in adolescent-parent relationships and decreased problem behaviors, decreased substance use, and improved academic functioning.

Parental monitoring. Many studies comment on the protective power of parental involvement, monitoring, knowledge, and control (Crockett et al., 2007; Fletcher et al., 2004; McKinney & Renk, 2011; Repinski & Zook, 2005). Repinski and Zook (2005) found a relationship between interdependence – defined in their study as parental involvement, monitoring, and control – and decreased problem behaviors in adolescent-mother dyads. Fletcher and colleagues (2004) specifically investigated parental monitoring, again identifying this relationship feature as a deterrent to externalizing behaviors. McKinney and Renk (2011) likewise found that authoritative parenting, a style using involvement, monitoring, and control, was associated with both fewer internalizing and fewer externalizing symptoms among youth in early adolescence. Additional protective factors include parental knowledge (Fletcher et al., 2004) and parental discipline (Ge et al., 1996). There is even an association between parental control alone and reduced problem behaviors among adolescents (Crockett et al., 2007; Fletcher et al., 2004). Despite these findings, parental hostility and conflict can lead to both depressive symptoms and externalizing conduct problems (Ge et al., 1996; McKinney & Renk, 2011).

Parent-Adolescent Son Relationships

As indicated briefly in the findings above (Crockett et al., 2007), the impact of the parent-adolescent relationship on adolescent outcomes differs for sons and daughters. This statement has relevance for adolescents as a developmental group (Russel & Saebel, 1997) and for Mexican American adolescents as a cultural group (Dumka et al., 2009). Studies specifically highlight the need to focus on parent-adolescent son relationships (McGue et al., 2005; McKinney & Renk, 2011), especially in the Mexican American community (Crockett et al., 2007). In comparison to

female adolescents, male adolescents experience more conflictive parent-adolescent relationships, leading to more internalizing and externalizing symptomatology (McGue et al., 2005; McKinney & Renk, 2011). Accordingly, although both male and female Mexican American adolescents value open parent-adolescent communication, only male adolescents report that open communication with their fathers sometimes leads to conflict and avoidance behaviors (Crockett et al., 2007).

In light of these gendered adverse outcomes, the degree of protection offered by parent-adolescent relationships is correspondingly gender-specific. Despite aforementioned findings about quantity of conflict, Crean (2008) suggests that the protectiveness of parent-adolescent relationships may be most powerful for sons. Conflict between a male adolescent and his parent can be reversed or circumvented by a supportive parental relationship with the other parent; this reparative quality does not hold true for adolescent girls (Crean, 2008). Furthermore, in addressing boys' internalizing symptoms, support of one parent is protective regardless of the level of conflict with the other parent (Crean, 2008). Research reveals similar trends for externalizing symptomatology; mother-adolescent attachment predicts reduced risk for boys more strongly than for girls (Cota-Robles & Gamble, 2006; Nye, 1958). Finally, despite the cited potential of parental support among male adolescents, studies consistently indicate that the greatest levels of closeness occur between mothers and daughters and that adolescent girls demand more parental responsiveness than their male counterparts (Bogenschneider & Pallock, 2008; Cota-Robles & Gamble, 2006; Crockett et al., 2007). These latter findings suggest that there may be a general lack of attention to the development of positive, protective relationships between adolescent sons and their parents. Among many possible explanations, these trends advise a closer look at well-established gender norms and the role of self-advocacy or awareness on the part of adolescent and parent.

Cultural Formation of Parent-Adolescent Relationship Standards

Among the studies cited above regarding the protective elements of parent-adolescent relationships, several focused specifically on Latino parent-adolescent dyads (Crean, 2008; Kuhlberg et al., 2010; Smokowski et al., 2009) and Mexican American parent-adolescent dyads (Dumka et al., 2009; McDonald et al., 2005). Thus, the cultural milieu of these findings cannot be overlooked.

Respeto and familismo. Mexican American parent-son relationships exist within the cultural context of *respeto* and *familismo*. *Respeto* refers to upholding respectful hierarchy based on age, gender, and social status (Crockett et al., 2007). The related concept of *familismo* is one of the traditional tenets and guiding principles of Mexican American culture, referring to the strong cultural emphasis on commitment to the needs of the family and community above the needs of the individual (Crean, 2008; Healthy Hispanic Marriage Initiative [HHMI], 2010). Research suggests that the defining and structuring cultural values of *respeto* and *familismo* protect against parent-adolescent conflicts and risky adolescent behaviors while promoting positive mental health outcomes (Ayon et al., 2010; Crockett et al., 2007; Kuhlberg et al., 2010; McDonald et al., 2005; National Council of La Raza [NCLR], 2005; Smokowski et al., 2009). Branstetter and Cottrell (2008) speak to the protective nature of these cultural institutions and their resulting behavior, citing secure attachment, shared values and expectations, mutual understanding, and clear roles as critical elements in their efficacy and protectiveness. These findings suggest that a well-functioning, united Mexican American family may be more likely to have children with good mental and emotional health.

Machismo. Above all, it is critical to understand the cultural expectations of male children in Mexican American families. *Machismo* is a concept in many Latino cultures that supports the role of males as protectors (Denner & Dunbar, 2004; HHMI, 2010). Gender roles traditionally tend to be significantly differentiated and traditional in Latino cultures, and

differences in gender roles become particularly prominent during adolescence (Ramirez, 1989).

In light of expectations associated with *machismo*, parents of Latino adolescents, and specifically Mexican origin adolescents, tend to monitor and restrict the behavior of their daughters more than their sons (Cota-Robles & Gamble, 2006; Dion & Dion, 2001). While Mexican American girls entering adolescence are specifically protected and kept close to home, boys are asked to balance a focus on the self and a focus on the cultural community with particular value given to qualities of assertiveness, independence, autonomy, knowledge, and ability (McDonald et al., 2005; Murillo, 1976).

Like *respeto* and *familismo*, *machismo* is a “culturally embedded protective factors” (Voisine, Parsai, Marsiglia, Kulis, & Nieri, 2008, p. 270-271). Adolescent boys of Mexican origin recognize their duty to honor the family and operate out of their perceptions of parental expectations, leading to constructive and positive behaviors (Voisine et al., 2008). Kulis, Marsiglia, and Nagoshi (2010) suggest another explanation for the protection offered by the aforementioned cultural concepts, specifically *machismo*. Gender roles tend to be damaging when taken to extremes, such as when assertiveness transforms into aggressiveness. In contrast to these “negative” gender roles, “positive” gender roles have protective qualities (Kulis et al., 2010). Kulis and colleagues (2010) found a significant correlation between positive gender roles and decreased internalizing and externalizing problems. Due to the complex balance – as noted above – required by males in fulfilling their culturally determined role, *machismo* maintains qualities of a positive gender role. Like *respeto* and *familismo*, *machismo* consequently may have protective potential for male Mexican American adolescents.

Differential Outcomes Based on Parental Gender

Considering the gendered framework of parenting-based adolescent outcomes and Mexican American culture, it is important to look at differential outcomes of parent-adolescent relationships based on parental gender. In a sample of 710 adolescents, the majority of whom

were Latino, McKinney and Renk (2011) found that mothers' parenting contributed more to conflict and externalizing behaviors than fathers' parenting. One distinguishing trend between the parenting styles of mothers and fathers was that fathers spent less time with their adolescent children than mothers, so their impact on the psychological health of their adolescents was more indirect; the role of fathers in this study focused on provision of "problem-solving, stability, and conflict resolution" (McKinney & Renk, 2011, p. 457). The key distinction was that while fathers dealt with conflict and the family environment, mothers were more involved in providing direct care (McKinney & Renk, 2011).

Reinforcing these gender trends, Dumka and colleagues (2009) and Crockett and colleagues (2007) honed in on differences based on parental gender in families of Mexican origin. Dumka and colleagues (2009) found that fathers' opinions about their sons' peer interactions were more strongly felt and mattered more to adolescents than mothers' opinions, a finding which may relate to the power of *machismo* as a formative parent-adolescent influence in the father-son dyad. Furthermore, fathers' monitoring had a positive influence on the peer relationships of their sons. Dumka and colleagues (2009) also uncovered a link between fatherly warmth and the classroom behavior of male adolescents in Mexican origin families, with warmth leading to better behavior.

Echoing the findings of McKinney and Renk (2011), Crockett and colleagues (2007) compared fathers and mothers in terms of emotional versus instrumental caregiving and support, noting the "implicit nature of paternal caring" (p. 652). Interviewees descriptions of "implicit" care included the father's presence in the home, concrete activities such as shared experiences, and indirect forms of care, such as working extra hours to provide for the family. Adolescents revealed that they did not need or expect overt demonstrations of affection from their fathers; as one male adolescent noted, "you just know...that he cares about you" (p. 651). Mexican American adolescents' perceptions of good parent-adolescent relationships indicated that parental

support was stereotypically gendered, with mothers providing more direct displays of emotion and caring than fathers (Crockett et al., 2007).

Next Steps: The Present Study

The review of the literature indicates the important work of past researchers in identifying the outcomes and elements of positive parent-adolescent relationships among Mexican American adolescents. However, a majority of past research has examined the broader Latino community (Crean, 2008; Kuhlberg et al., 2010; Smokowski et al., 2009) or Mexican American sample populations restricted by size, age, generational status, or location (Crockett et al., 2007; Dumka et al., 2009; McDonald et al., 2005). Furthermore, although studies look at adolescent-mother and adolescent-father relationships (Crockett et al. 2007; Dumka et al., 2009, McKinney & Renk, 2011), research specifically on adolescent sons is minimal. Finally, among the research available on male adolescents, studies focus far more on behavioral health outcomes than psychological health outcomes (Crockett et al., 2007; McGue et al., 2005; McKinney & Renk, 2011). Clearly, it is a challenge to simultaneously look at the developmental, ethnic, cultural, and gender contexts of this population. In acknowledgment of this complexity, it would be meaningful to take a more complete and a more directed look at the emotional health of Mexican American male adolescents.

Consequently, this study employed a national dataset to expand applicability and a quantitative analysis to reinforce and concentrate previous research. Using an expanded respondent base, the study helped to identify qualities of positive parent-adolescent relationships among a considerably more representative sample of Mexican American male adolescents. Furthermore, this project explicitly built on the work of Crockett and colleagues (2007), who made significant inroads on the focus topic by examining qualitative meanings of positive parent-adolescent relationships. In their recommendations for future research; they suggest a deep investigation of “what counts as affectionate parental behavior...for Mexican American youth,” a

proposal that helped to guide this research (p. 662). Moreover, Crockett and colleagues (2007) identified an important inconsistency; they determined that while male and female Mexican American adolescents attribute certain desirable characteristics to positive parent-adolescent relationships, they often rate their own relationships positively even if they lacked those advantageous traits. In an attempt to control for this reporting tendency, this study used a quantitative approach, including a wider range of finite questions and multiple scales for crosschecking trends.

Theoretical Framework

This study acknowledges both internal and external factors as key influences on the protective parent-adolescent relationship. In examining these factors, the centrality of environment, parent-child rapport, and adolescent growth and development mandate a closer look at the Ecological Systems Theory, Attachment Theory, and Psychosocial Stages of Development. Each of these theories lends direction and footing to this study, as outlined below.

Ecological Systems Theory

This study gives particular attention to intra- and extra-familial systems and cultural constitutions of gender and family. Consequently, it is necessary to view this research through an ecological lens. In other words, an individual's environment and the many systems of which he or she is a part are of critical importance in that individual's development and identity. Despite its ongoing reconstitution, the Ecological Systems Theory maintains two enduring core propositions (Bronfenbrenner, 2000):

Proposition I. Human development takes place throughout life through processes of progressively more complex reciprocal interaction between an active, evolving biopsychological human organism and the persons, objects, and symbols in its immediate external environment. To be effective, the interaction must occur on a fairly regular basis

over extended periods of time. Such enduring forms of interaction in the immediate environment are referred to as proximal processes.

Proposition II. The form, power, content, and direction of the proximal processes effecting development vary systematically as a joint function of the characteristics of the developing *person*: the *environment* – both immediate and more remote – in which the processes are taking place: the nature of the *developmental outcomes* under consideration: and the social continuities and changes occurring over *time* through the life course and the historical period during which the person has lived. (p. 130)

These propositions speak to the complex interplay of internal and environmental forces that impact every individual. Proximal processes are particularly relevant to this study in the form of parent-adolescent interactions. Family and parents constitute the immediate environment in which adolescents grow and develop, dictating their daily interactions and functioning. More remote forces at play include expectations of broader culture and society, such as the cultural institutions explored earlier for the Mexican American community. The renegotiation of relationships and environments inherent in adolescence – given the focus of this developmental stage on transitions and identity – demands attention to a broad span of influences, from micro systems to macro systems. The basic purpose of this research rests on the concept of person-in-environment; an adolescent exists as a product of and influence on his/her environment. While the research questions focus on micro systems of specific interpersonal dyads, the selection of this population of interest is a result of attention to the macro system of Mexican American culture. By exploring a wide range of elements contributing to adolescent development, parenting styles, and their culmination in the parent-adolescent relationship, this study will address the bio-psycho-social-cultural identity and needs of Mexican American male adolescents.

The ecological perspective takes on additional importance when applied to minority youth. Schriver (2004) particularly highlights the extra-familial conditions that impact and

complicate minority youth development, including poverty, discrimination, and immigration.

The management of differential norms in the home, school, and society – as revealed by peer and media portrayals – can contribute to conflictive relationships as well as physical, behavioral, social, and emotional health struggles. These factors clearly provide meaningful context for the dyads of interest in this study: Mexican American adolescent sons and their resident parents.

Attachment Theory

Attachment theory goes hand in hand with ecological theory in the study of adolescence: “Adolescence is characterized by biological, mental and social change, and as such marks a developmental period where the ‘self-in-relation-to-other’ dialect is particularly strong” (Brown & Wright, 2001, p. 16). Brown and Wright (2001) support the notion that ecological systems and social contexts have a critical place in understanding attachment, necessarily moving beyond the traditional attachment focus on early childhood.

Certainly, conventional early childhood attachment theory informs adolescent attachment theory. Brown and Wright (2001) note that early parent-child development is critical in the child’s ability to learn emotional regulation. There are undeniable parallels between this core outcome and the impact of attachment in adolescence: “the quality of attachment relationships is important as protective or risk factors” for future social and psychological adjustment (Brown & Wright, 2001, p. 21). Therefore, the ultimate potential of positive attachment in childhood is similar, and similarly powerful, in adolescence.

Furthermore, Branstetter and Cottrell (2008) write about attachment as an unwavering element of all healthy and positive parent-child relationships, inclusive of adolescence. They indicate that of John Bowlby’s four attachment types, secure attachment is associated with the most positive outcomes at all stages of life, including adolescence. Secure attachment leads to successful psychological adjustment, fewer mental health concerns, less risky behavior, better relationships, and better coping strategies in adolescence. Adolescents must navigate the path

towards autonomy while simultaneously maintaining strong relationships to their parents, and secure attachment promotes the attainment of these two seemingly conflictive goals. Secure attachment provides adolescents with positive relational models in their parents and greater trust and support from their parents, which usually translates to more opportunities for autonomy. This study builds on these attachment perspectives by acknowledging attachment as an ongoing feature in the development of the parent-child relationship and the child's emotional health. The ideas of emotional support and parental monitoring also surface as two key themes in the research.

The evolutionary nature of adolescence brings with it its own unique attachment considerations. Cognitive changes that occur during adolescence impact attachment significantly and demand a renegotiation of ideas and relationships (Brown & Wright, 2001). Adolescence marks a period of transition, experimentation, and changes in thinking about the continuum of systems with which adolescents interact. Given these transformations and the conflict that can result, developing parent-adolescent attachment is its own singular process separate from parent-child attachment. Overall, there is an irrefutable connection between attachment and outcomes of parent-child relationships at all formative ages.

Erikson's Stages of Psychosocial Development

Given this study's attention to outcomes in adolescence, it is critical to examine the basics of adolescent development. Erik Erikson created an eight-stage model of psychosocial development that extends over the life span; each stage includes a specific conflict or pair of contrasting psychosocial goals, important events, and ultimate outcomes. The fifth stage of Erikson's eight development stages is adolescence; the basic conflict of this stage is identity vs. role confusion, ideally leading to the outcome of fidelity and a loyalty to self and society (Erikson, 1993). The terms identity, role confusion, and fidelity all speak to the influences of environment and attachment discussed above; they likewise reflect the complexity of the process

of adolescence. A critical element of adolescence, according to Erikson, is the renegotiation of relationships in an effort to create a self-identity (Erikson, 1993). This renegotiation occurs in the context of reconciling who an adolescent is with the person society wants him or her to be; in this conflict, the importance of both interpersonal relationships and the broader environment resurfaces. Mexican American male adolescents in this stage must re-examine their relationships with themselves as well as their familial and cultural expectations.

A key element of this re-examination is the arbitration of the parent-adolescent relationship. In the four stages preceding adolescence, Erikson references parents as key players in how children manage the basic conflict of a given stage; each conflict arises from two opposing concepts, and parent guide the child in finding reconciliation between these two (Erikson, 1993). Interpersonal relationships are the focus of the fifth stage, but parents do not direct the negotiation of identity and role confusion as they did with opposing concepts in the previous stages. This realization illustrates the uniqueness of the parent-adolescent dynamic as a protective or damaging factor in adolescent development, which is the ultimate focus of this study.

Synthesis

These theories clearly generate the foundation of this work. They acknowledge the importance of the parent-adolescent relationship as well as the complexity of searching for its particular features. Furthermore, all of these theories help to strengthen the practice implications that come from this study. Psychoeducation, family work, and engagement of adults outside of the home all depend on appreciation of systems, attachment, and adolescent development.

Methodology

Informed by existing research and the theoretical framework above, this study completed a secondary data analysis of the National Longitudinal Adolescent Health Survey (Add Health) to answer three interlocking research questions (Monette, Sullivan, & DeJong, 2011).

Research Questions

This study looked for responses to the following core research questions:

1. *What factors influence impressions of parent-adolescent closeness among Mexican American male adolescents?*
2. *What factors contribute to Mexican American male adolescents' perceptions of parental degree of care?*
3. *Which elements of protective parent-adolescent relationships (as identified in research questions #1 and #2) contribute most strongly to positive emotional health outcomes for male Mexican American adolescents?*

To set the stage for the data analysis plan that will address these questions, the methodology of the Add Health study and of the current study appear in succession below.

National Longitudinal Study of Adolescent Health (Harris & Udry, 2012)

Study and purpose of design. The National Longitudinal Study of Adolescent Health (Add Health) was a nation-wide, nationally representative, longitudinal study of adolescents (grades seven through twelve) that took place in four research waves, beginning in 1994 and concluding in 2008. The product of a United States Congress mandate, Add Health examined how various contexts influence adolescent health. Add Health investigators collected data on respondents' social, economic, psychological, and physical well-being as well as information on their families, neighborhoods, communities, schools, and interpersonal relationships. The ultimate goal of Add Health was to gain an understanding of how to (a) protect adolescent health

and (b) promote health and achievement in young adulthood. (*Add Health Research Design*; Harris et al., 2009)

Data collection instrument development and categories of questions. Wave I of the Add Health survey took place in two stages over the course of 16 months. In Stage 1, researchers administered in-school questionnaires to students and school administrators. In Stage 2, investigators interviewed adolescents and their guardians in their homes. Adolescent responses from Stage 2 constituted the data source for the current research study. Creators of the Add Health in-home adolescent interview sought to create a data collection instrument that could (a) survey a nationally-representative sample and (b) collect data for multidisciplinary research purposes (Udry, 2001). The in-home interview questionnaire contained 40 distinct sections and covered topics including demographics, health history and knowledge, educational history, family structure and function, interpersonal relationships, risky behaviors, and protective factors (*Add Health Research Design*; Harris et al., 2009; Udry, Bearman, & Harris, 1994-5).

Sampling method and collection process. Add Health used cluster, systematic, and stratified sampling methods to identify a nationally representative sample of 132 schools within 80 communities. School sizes ranged from under 100 to over 3,000 students. During the 1994-1995 academic school year, the In-School Questionnaire was given to 90,118 seventh through twelfth grade students. Administration of the questionnaire occurred on a single school day during a 45 to 60 minute class period; no make-up opportunities were offered. (*Add Health Research Design*; Harris et al., 2009)

To select the core sample for in-home interviews (Stage 2), students in each participating school were divided into groups based on grade and sex. Out of each group, 17 students were randomly chosen, totaling about 200 adolescents from each community. This core sample consisted of 12,105 adolescent interviewees. Additional in-home interview samples were taken to ensure representation of specific populations based on ethnicity,

disability status, geographic location, and genetic factors. In-home interviews took place between April 1995 and December 1995. The interview questions were identical for each respondent, but interviews varied in time from one to two hours. (*Add Health Research Design*; Harris et al., 2009)

Measures of protection of human subjects. Adolescents selected for in-home interviews and their parents or legal guardians had to provide written informed consent prior to participation. To protect confidentiality, no paper questionnaires were used in these interviews; all responses were recorded on laptop computers. Investigators first administered Computer Assisted Personal Interviewing (CAPI) to adolescents; questions regarding “less sensitive topics” were read aloud by the interviewer, who then recorded them on the computer. Interviewers then administered the Audio Computer Assisted Self Interview (ACASI); questions regarding “more sensitive topics” were pre-recorded so that respondents could listen to the questions using headphones and enter their own responses on the computer. This method helped to preserve privacy and to avoid possible interviewer or parent influence. Finally, respondents were screened to ensure that they were asked age- and experience-appropriate questions. (*Add Health Research Design*; Harris et al., 2009)

Why Add Health?

The mission and breadth of the Add Health survey made it an ideal compliment to the research study at hand. Despite research evidence of the protective potential of positive parent-adolescent relationships (Branstetter & Cottrell; Crean, 2008; Dumka et al., 2009; Ge et al., 1996; Kuhlberg et al., 2010; McKinney & Renk, 2011; Smokowski et al., 2009), the specific components of those relationships were unclear. The Add Health survey facilitated this research, as it was “designed to go beyond demographic descriptions to identify the underlying ‘social mechanisms’ that account for poor health and high-risk behaviors” (Boonstra, 2001). In other words, Add Health facilitated an investigation of not only whether close and caring parent-

adolescent relationships existed but also of the components and consequences of those bonds among Mexican American male adolescents.

Furthermore, because the Add Health study was conducted nationally, it provided more generalizable findings. In contrast to studies limited by region, generational status, or age (Crockett et al., 2007; Dumka et al., 2009; McDonald et al., 2005), “incorporating systematic sampling methods and implicit stratification into the Add Health study design ensured this sample [was] representative of US schools with respect to region of country, urbanicity, school size, school type, and ethnicity” (Harris et al., 2009). The Add Health Wave I Public-Use Dataset thus allowed for a much more complete picture of the population of interest. Add Health has become a widely used and widely respected national data resource for the study of adolescent health and outcomes (Harris, 2011). In short, it was created for research efforts like the present study.

Present Study

Study and purpose of design. This study employed a secondary, cross-sectional analysis of Add Health data using SPSS software (Monette et al., 2011). This investigation made use of Wave I, Stage 2 data, specifically the in-home interviews conducted with seventh through twelfth graders between April 1995 and December 1995 (*Add Health Research Design*; Harris et al., 2009; Udry et al., 1994-5).

Data collection instrument development and categories of questions. No data collection instrument was developed for this study, as no primary data collection was conducted. Investigated themes and variables are described below in the proposed secondary analysis study plan.

Sampling method and collection process. This study employed a non-probability sample (Monette et al., 2011). All respondents who self-identified as Mexican or Mexican American and male ($n = 203$) made up the sample for this study.

Measures of protection of human subjects. All data used in this study was publicly available through the Interuniversity Consortium for Political and Social Research (ICPSR). The Data Sharing and Demographic Research Project, funded by the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) originally processed, archived, and disseminated the Add Health research data (ICPSR, N.D.b). Add Health investigators and the ICPSR then worked to make the data public. They preserved the confidentiality of participating subjects, households, schools, and communities by employing a sophisticated “security system” (Harris et al., 2009). Through this system, identification numbers were used to collect data, but those numbers were never used for data distribution. The system prevented anyone, even an investigator, from matching a respondent to his or her answers. ICPSR also provided the following statement about confidentiality on their website: “ICPSR removes identifiers and observes standards of practice that protect the confidentiality of research participants. ICPSR safeguards sensitive data through varying levels of access” (ICPSR, N.D.a).

Furthermore, use of publicly available data was contingent upon researcher agreement to Add Health and ICPSR Terms of Use (See Appendix A). Specified terms in this contract included restricting use of data to research and summative statistics, avoiding identifying information, and avoiding inadvertent disclosure of subjects (ICPSR, N.D.a). Given the precautions outlined above, no party involved in this study (researcher, chair, committee members) had access to identifying information.

Strengths and limitations of application of Add Health findings. As with any study, it is critical to identify the noteworthy strengths and inevitable limitations of this secondary data analysis.

Strengths. The most significant strength of using Add Health data was the generalizability of results. Add Health supplied a large and diverse population from which to draw meaningful and applicable trends and results; in comparison to previous research, the

sample size was much larger and much more regionally diverse. Furthermore, because of the depth and pre-existence of Add Health data, this study was able to more efficiently look at multiple factors at once. Above all, since Add Health was such a thorough and prestigious undertaking, the data resulting from this study allowed for an examination of the health of minors, a vulnerable population that might not otherwise be so easily or broadly studied.

Limitations. Despite these critical benefits, there were still noteworthy flaws in this design. First of all, the use of secondary data did not allow for follow-up questions, which was at times prescriptive and confining. Additionally, this study specifically sought the perspective of adolescents, not adults reflecting on their adolescence; although this longitudinal Add Health study concluded in 2008, the data used for this research effort was restricted to 1994 and 1995, the two years during which the original interviews of seventh to twelfth grade adolescents were conducted. Timing restrictions also limited the applicability of individual Add Health variables. Rather than measuring overall frequency of certain shared activities or exchanges, some variables only considered the month prior to the interview; the number of times an adolescent had an argument or talked about a personal problem with his parent in the last four weeks might not always be indicative of the overall commonality of this experience. Furthermore, although the use of a nationally representative dataset afforded this research study a sizeable sample of 203 respondents, this sample was still relatively small given the increasing presence of Mexican American adolescents in the United States. Finally, measures of closeness and care were used across all cultures in Add Health. In other words, the variables outlined in the secondary data analysis study plan were not selected for the purpose of measuring closeness and care specific to Mexican American culture and experience (i.e. with due consideration of gender expectations, immigration status, acculturation, etc.). Therefore, these features were not unquestionably the most pertinent measures of closeness or care within the dyads of interest.

Proposed Secondary Analysis Study Plan

The following data analysis plans begins with a description of measures of closeness, care, and emotional health. After these descriptions comes an outline of the specific statistical tests that were completed for the present study.

Measures of closeness and care. Based on previous research and available Add Health data, this research study examined features of adolescent-parent relationships using five broad themes: (a) time spent together, (b) communication, (c) goals and academics, (d) warmth and emotional support, and (e) parental monitoring. As detailed below, there was more data available to explore maternal-adolescent relationships than paternal-adolescent relationships; consequently, not all questions offered direct comparisons of mothers and fathers. Furthermore, variables available to explore overall parental care were fewer and different than those for either maternal or paternal features.

Time spent together. Crockett and colleagues (2007) found that Mexican American adolescents regard shared activities as a sign of parental care, particularly in the father-son dyad. To measure this theme, this study looked at activities done with resident parents in the past month. Add Health Survey investigators asked respondents about ten specific activities, referred to collectively in this study as the Shared Activities Scale. Variables used to assess time spent together included this interval-level scale as well as four nominal level variables pulled from this scale (“Have you gone shopping; Have you played a sport; Have you gone to a religious service or church-related event; Have you gone to a movie, play, museum, concert, or sports event?”) (Udry et al., 1994-5). The nominal and scale level variables in this category were all applied to maternal and paternal variables independently.

Communication. Past research highlighted the protective quality of open communication between parents and adolescents (Brody et al., 2005; Crockett et al., 2007). This study borrowed three nominal variables from the Shared Activities Scale to measure this theme: “Have you talked

about someone you're dating, or a party you went to; Have you had a talk about a personal problem you were having; Have you had a serious argument about your behavior?" (Udry et al., 1994-5). This study also measured communication with ordinal level variables that rated adolescents' satisfaction with parent-adolescent communication using a Likert scale: "You are satisfied with the way your (mother/father) and you communicate with each other" (Monette et al., 2011; Udry et al., 1994-5). All of the variables in this theme were measured separately for each resident parent.

Goals and academics. The research of Crockett and colleagues (2007) indicated that Mexican American adolescent boys cite parental attention to school activities as indicative of care. As with the communication variables, this theme was partially measured by three nominal variables from the Shared Activities Scale ("Talked about your school work or grades; Worked on a project for school; Talked about other things you're doing in school") (Udry et al., 1994-5). Measures of this theme also included two ordinal variables, indicating mothers' and fathers' academic ambitions for their adolescent children as perceived by the adolescent themselves: "On a scale of 1 to 5, where 1 is low and 5 is high, how disappointed would she/he [your mother/father] be if you did not graduate from high school?" and "On a scale of 1 to 5, where 1 is low and 5 is high, how disappointed would she/he [your mother/father] be if you did not graduate from college?" (Udry et al., 1994-5). As with the two previous categories, the variables in this theme were applied independently to maternal and paternal features.

Warmth and emotional support. Parental warmth and emotional support surfaced above all other themes in previous research on positive parent-adolescent relationships (Bogenschneider & Pallock, 2008; Brody et al., 2005; Crockett et al., 2007; Fletcher et al., 2004; Ge et al., 1996; Repinski & Zook, 2005). Measures of this theme in Add Health differed for mothers, fathers, and parents as a unit. Maternal and paternal measures were pulled from Section 18: Personality and Family. This study used three ordinal measures of maternal warmth and emotional support:

“Most of the time, your mother is warm and loving toward you,” “Your mother encourages you to be independent,” and “When you do something wrong that is important, your mother talks about it with you and helps you understand why it is wrong” (Udry et al., 1994-5). Responses were recorded using Likert scales, from strongly agree to strongly disagree (Monette et al., 2011). The sole measure of paternal warmth and emotional support mirrored the first measure of maternal warmth and emotional support: “Most of the time, your father is warm and loving towards you” (Udry et al., 1994-5). The three ordinal variables measuring general parental warmth and emotional support came from Section 35: Protective Factors: “How much do you feel that people in your family understand you?”, “How much do you feel that you and your family have fun together?”, and “How much do you feel that your family pays attention to you?” (Udry et al., 1994-5).

Parental Monitoring. Previous research showed that parental involvement, knowledge, monitoring, and control have protective qualities for adolescents (Crockett et al., 2007; Fletcher et al., 2004; McKinney & Renk, 2011; Repinski & Zook, 2005). Mexican American male adolescents specifically mentioned parental monitoring as indicative of parental care (Crockett et al., 2007). This study therefore looked at measures of parental monitoring as measured by a researcher-compiled scale pulled from the “Relations with Parents” section of the Add Health in-home questionnaire (Udry et al., 1994-1995). This Parental Monitoring Scale was made up of seven nominal variables that were used collectively in this study as an interval-level variable. Operational definitions of each nominal variable began with, “Do your parents let you make your own decisions about...?” (Udry et al., 1994-5). Factors in parental degree of monitoring included curfew, social relationships, clothing, media exposure, and food choices. This scale only addressed overall parental behavior, not specific maternal or paternal features.

Measures of emotional health. Two separate scales measured emotional health in this study: the Feelings Scale and the Self-Esteem/Mental Health (SEMH) Scale.

Feelings scale. The Feelings Scale was an interval level variable pulled directly from the Add Health survey (Udry et al., 1994-5). This scale included 19 questions. Low scores indicated positive feelings while high scores indicated negative feelings; four questions were reverse scored to fit with this trend (Monette et al., 2011). Possible scores ranged from 0 to 57. This scale was nearly identical to the National Institute of Mental Health’s Center for Epidemiologic Studies – Depression Scale (CES-D), “a cost effective, reliable, and valid screening instrument used to quickly assess the behavioral, cognitive, and affective symptoms of depression” (Fisher, 2009; Radloff, 1977).

SEMH scale. The Self-Esteem/Mental Health (SEMH) Scale was a researcher-compiled scale using a segment of the Personality and Family Scale (Section 18) from the Add Health survey (Udry et al., 1994-5). This interval level variable was made up of 11 separate questions. Possible scores ranged from 11 to 55, with 11 signifying higher self-esteem and more positive mental health indicators and 55 signifying lower self-esteem and more negative mental health indicators.

Specific statistical tests. A list of study variables, including codes, operational definitions, response options, and levels of measurement, appears in Appendix B. An outline of each individual statistical test appears in Appendix C. Below are the research questions, hypotheses, and variable details for each group of statistical tests.

Tests of association: Closeness and care. The first set of inferential statistics answered the research question: *Is there an association between levels of closeness and levels of care in parent-son relationships for Mexican American male adolescents?* Levels of care and closeness were both ordinal level variables. The hypothesis was that an association exists between levels of closeness and levels of care, as perceived by adolescent sons; the null hypothesis was that no association exists. The variables were measured for association using a Chi-square. A separate Chi-square was run for mothers and for fathers.

Tests of association: Features of closeness in mother-adolescent son relationships.

This set of statistical tests responded to the research question: *Which variables contribute to perceived levels of maternal-adolescent closeness between resident mothers and Mexican American male adolescents?* Mother-son closeness was an ordinal level variable, operationally defined as “How close do you feel to your mother/adoptive mother/stepmother/foster mother?” (Udry et al., 1994-5). Chi-square analyses were completed to test the relationship between this measure of closeness and all mother-specific nominal and ordinal level variables identified above in the Features of Closeness and Care section.

Tests of association: Features of care in mother-adolescent son relationships. This set of statistical tests responded to the research question: *Which variables contribute to levels of parental care by resident mothers as perceived by Mexican American adolescent sons?* To answer this question, this study duplicated the statistical analysis plan from the Features of Closeness in Mother-Adolescent Son Relationships section above, replacing the measure of mother-adolescent closeness with perceived level of maternal care. Perceived level of care was also an ordinal level variable, operationally defined as “How much do you think she cares about you?” (Udry et al., 1994-5).

Tests of association: Features of closeness in father-adolescent son relationships. This set of statistical tests responded to the research question: *Which variables contribute to perceived levels of paternal-adolescent closeness between resident fathers and Mexican American adolescent sons?* Father-son closeness was an ordinal level variable, operationally defined as “How close do you feel to your father/adoptive father/stepfather/foster father?” (Udry et al., 1994-5). Chi-square analyses were completed to test the relationship between this measure of closeness and all father-specific nominal and ordinal level variables identified in the Features of Closeness and Care section above.

Tests of association: Features of care in father-adolescent son relationships. This set of statistical tests responded to the research question: *Which variables contribute to perceived levels of parental care by resident fathers as perceived by Mexican American adolescent sons?* To answer this question, this study duplicated the statistical analysis plan from the Features of Closeness in Father-Adolescent Son Relationships section above, replacing the measure of father-adolescent closeness with perceived level of paternal care. Perceived level of care was also an ordinal level variable, operationally defined as “How much do you think he cares about you?” (Udry et al., 1994-5).

Tests of association: Features of parental care. This set of tests answered the research question: *What variables contribute to perceived levels of parental care among Mexican American adolescent sons?* Given research findings that a positive parent-adolescent relationship can protect male adolescents from the negative effects of conflict with the other parent (Crean, 2008), it was important to consider features to promote overall parental care. A series of three Chi-square analyses were run to test the relationships between parental care and (a) family understanding, (b) family fun, (c) and family attention. Parental care was an ordinal level variable, operationally defined as “How much do you feel that you parents care about you?” (Udry et al., 1994-5). The three variables with which parental care was analyzed were also ordinal variables, operationally defined as (a) “How much do you feel that people in your family understand you?”, (b) “How much do you feel that you and your family have fun together?”, and (c) “How much do you feel that your family pays attention to you?” (Udry et al., 1994-5).

Tests of association: Features of closeness/care and emotional health. This set of statistical tests examined the association between all nominal and ordinal variables outlined in the Features of Closeness and Care section and (a) the Feelings Scale and (b) the SEMH Scale. These analyses collectively addressed the research question: *Which features of maternal,*

paternal, and parental closeness and care contribute most to the emotional health of Mexican American adolescent males?

Tests of statistical difference: Emotional health. This statistical test was designed to determine the relationship between the two emotional health scales, the Feelings Scale and the SEMH Scale. This test addressed the research question: *Is there a statistical difference in scores on the Feelings Scale based on scores on the SEMH scale?* The hypothesis was that more positive feelings and higher self-esteem/more positive mental health indicators would go hand in hand; the null hypothesis was that there would be no association between scores on these two scales. An independent samples t-test was conducted to test for this statistical difference.

Tests of statistical difference: Maternal and paternal closeness/care. This set of inferential statistics answered the following two compound research questions:

- (1) *Is there a statistical difference between levels of maternal closeness/care and (a) emotional health outcomes and/or (b) time spent together?*
- (2) *Is there a statistical difference between levels of paternal closeness/care and (a) emotional health outcomes and/or (b) time spent together?*

Levels of closeness and levels of care were both ordinal variables. Emotional health was measured by two scale variables, the Feelings Scale and the SEMH Scale. The Shared Activities Scale measured time spent together. Research indicated that non-conflictive parent-adolescent relationships yield positive mental health outcomes (Branstetter & Cottrell; Crean, 2008; Dumka et al., 2009; Ge et al., 1996; Kuhlberg et al., 2010; McKinney & Renk, 2011; Smokowski et al., 2009) and that time spent together has positive impacts on the parent-adolescent relationship (Bogensneider & Pallock, 2008; Crockett et al., 2007). Consequently, the research hypothesis was that higher levels of closeness and/or care would correspond with more positive feelings, increased self-esteem/more positive mental health indicators, and more time spent together, as measured by the Feelings, SEMH, and Parental Monitoring scales respectively. The null

hypothesis was that no such relationships would exist between levels of care or closeness and scores on these three scales. A series of independent samples t-tests were conducted to test this hypothesis. Separate t-tests were conducted with each scale for mother-adolescent closeness, maternal care, father-adolescent closeness, and paternal care.

Tests of statistical difference: Parental care. This set of inferential statistics answered the research question: *Is there a statistical difference between levels of parental care and (a) emotional health outcomes and/or (b) parental monitoring?* Levels of closeness and levels of care were both ordinal variables. Emotional health was measured by two scale variables, the Feelings Scale and the SEMH Scale. The degree of parenting monitoring was measured by the Parental Monitoring Scale. As noted above, non-conflictive parent-adolescent relationships promote positive mental health outcomes (Branstetter & Cottrell; Crean, 2008; Dumka et al., 2009; Ge et al., 1996; Kuhlberg et al., 2010; McKinney & Renk, 2011; Smokowski et al., 2009) and parental involvement, knowledge, monitoring, and control have protective qualities for adolescents (Crockett et al., 2007; Fletcher et al., 2004; McKinney & Renk, 2011; Repinski & Zook, 2005). Therefore, the hypothesis was that higher levels of closeness and/or care would correspond with more positive feelings, increased self-esteem/more positive mental health indicators, and increased parental monitoring, as measured by the Feelings, SEMH, and Parental Monitoring scales respectively. The null hypothesis was that no such relationships exist between levels of care or closeness and scores on these three scales. A series of independent samples t-tests were conducted to test this hypothesis.

Tests of statistical difference: Relationships between scales. A final set of independent samples t-tests were conducted to determine if there was a statistical difference in scale scores on the two emotional health scales using the Shared Activities and Parental Monitoring Scales as grouping variables. The hypothesis was the there would be a statistical difference in scores on

both of these latter scales between individuals scoring higher and lower on the emotional health scales. The null hypothesis was that no such differences would exist.

Findings

The purpose of this study was to identify dimensions and outcomes of closeness and care in parent-adolescent relationships among Mexican American sons. Data from the in-home interviews conducted during Wave I, Stage 2 of the National Longitudinal Study of Adolescent Health (Add Health) were used to determine significant features of these specific parent-adolescent dyads and their relationship with adolescent emotional health. Chi-square tests were completed to identify the association between pairs of categorical variables in sections (c) and (d). T-tests in section (d) revealed differences in scale scores based on a variety of grouping variables. This section summarizes the findings in six distinct parts: (a) recoding; (b) descriptive statistics; (c) tests of association for closeness and care variables; (d) tests of association for emotional health variables; (e) independent samples t-tests; and (f) limitations. Details of the findings follow.

Recoding

Several variables in this study were recoded into two distinct response categories (e.g. high and low). Recoding was completed to amplify the statistical significance of SPSS findings. Prior to recoding, many tables of results contained cells with expected counts of less than five. The fewer of these low-count cells, the higher the statistical significance of the results. By grouping responses, counts as well as significance increased. The number of cells with expected counts under five (post-recoding) appears in each findings table in this section, and recoding information appears in the corresponding descriptions. See Appendix D for full details of all recoded variables.

Descriptive Statistics

This study examined a sample of Add Health respondents. This sample was comprised of adolescents in grades seven through twelve who self-identified as both male and Mexican or Mexican American. The sample size (N) was 203.

Maternal closeness and care. 186 out of the 203 individuals in the sample provided responses to questions regarding maternal closeness and care; 17 respondents did not have a resident mother. Descriptive statistics for these two variables among the sample population were strongly skewed left, indicating overwhelmingly high perceived levels of both closeness and care. Both variables were recoded into two categories, denoted as (1) low-moderate and (2) high closeness or care. Table 1 shows the frequency distributions for these recoded maternal variables.

Paternal closeness and care. 152 out of the 203 individuals in the sample provided responses to questions regarding paternal closeness and care; 51 respondents did not have a resident father. Like maternal closeness and care, responses for these two variables were strongly skewed left, again indicating high perceived levels of paternal closeness and care. Variables were recoded to match measures of maternal closeness and care; two distinct categories were created to represent (1) low-moderate and (2) high perceptions of each variable. Table 1 shows the frequency distributions for these recoded paternal variables.

Table 1. Frequency Distributions of Adolescents’ Perceived Levels of Maternal and Paternal Closeness and Care

	Low-Moderate (Lower Levels) <i>(Original Codes: Not at all; Very Little; Somewhat)</i>	High (Higher Levels) <i>(Original Codes: Quite a Bit; Very Much)</i>
Perceived Level of Mother-Adolescent Closeness	14	172
Perceived Level of Maternal Care	4	182
Perceived Level of Father-Adolescent Closeness	24	128
Perceived Level of Paternal Care	6	146

Emotional health scales. Two scales were employed as measures of emotional health among adolescent respondents, the Feelings Scale and the Self-Esteem/Mental Health (SEMH)

Scale. All 203 respondents provided responses to the Feelings Scale. Scores were skewed right, indicating that there were more low scores. Lower scores on this scale indicated more positive feelings, while higher scores indicated more negative feelings. For the purposes of this study, the Feelings Scale scores were recoded into two categories, representing more positive feelings and more negative feelings towards self and environment.

199 of the 203 adolescent interviewees responded to the SEMH scale. Scores were skewed very strongly to the right. As with the Feelings Scale, this skew revealed more low scores, which were equated with higher self-esteem and better mental health indicators. Table 2 shows the frequency distribution for both recoded emotional health scales.

Table 2. Frequency Distribution of Recoded Emotional Health Scale Scores

	More Positive Feelings (Scores of 0-28; 0 = All Positive Feelings)	More Negative Feelings (Scores of 29-57; 57 = All Negative Feelings)
Feelings Scale	176	27
	Higher Self-Esteem/Better Mental Health (Scores of 11-32; 11 = Highest/Most Positive)	Lower Self-Esteem/Poorer Mental Health (Scores of 33-55; 55 = Lowest/Most Negative)
SEMH Scale	193	6

Tests of Association: Closeness and Care

Closeness and care. This study hypothesized an association between closeness and care as related features of positive parent-adolescent relationships. Two Chi-square analyses were conducted using SPSS software to determine if there was in fact an association between (a) perceived levels of closeness and care in the mother-adolescent dyad and (b) perceived levels of closeness and care in the father-adolescent dyad.

The overall Chi-square analysis for the maternal variables yielded a Pearson Chi-square value of 50.223 (df = 1) and a p-value of .000. Based on this p-value ($p < .05$), there was a statistically significant positive association between maternal-adolescent closeness and maternal care; in short, the null hypothesis was rejected. The crosstabulation revealed higher than expected counts between low maternal care and low maternal-adolescent closeness (count = 4;

expected count = .3) and between high maternal care and high maternal-adolescent closeness (count = 172; expected count = 168.3). These counts confirmed the association between perceived levels of mother-adolescent closeness and maternal care. Table 3 shows the results of this analysis.

The overall Chi-square analysis for the paternal variables yielded a Pearson Chi-square value of 5.498 (df = 1) and a p-value of .051. This p-value was greater than 0.05, indicating that the association was not statistically significant. Thus, the study failed to reject the null hypothesis of no association between paternal closeness and care. Table 3 summarizes these associations.

Table 3. Associations Between Closeness and Care

	Association Between Closeness and Care
Perceptions of Mother	N = 186 $\chi^2 = 50.223^{*#}$ (df = 1)
Perceptions of Father	N = 152 $\chi^2 = 5.498^{\#}$ (df = 1)

* p < 0.05

Cells with expected counts of less than 5 > 0

Mother-adolescent closeness. Several Chi-square analyses were conducted using SPSS software to analyze the following research question: *Which factors contribute to perceived levels of maternal-adolescent closeness?* These tests determined the association between several variables (see Table 4, ‘Variable’ column) and mother-adolescent closeness. Five of these analyses revealed statistically significant findings: (a) going shopping together (p = .000), (b) satisfaction with mother-adolescent communication (p = .000), (c) the adolescent’s perception of his mother as warm and loving (p = .000), (d) the degree to which the mother encourages her adolescent’s independence (p = .002), and (e) tendency of the mother to discuss the ethics of adolescent behavior. Since the p-values for these variables were less than .05, these analyses rejected the null hypothesis of no association for these five features of closeness. Consequently, there was an association between the five factors listed above (a-e) and perceptions of maternal-adolescent closeness. For all other statistical tests in this series, the study failed to reject the null hypothesis of no association. Table 4 shows the results of the analyses.

Table 4. Features of Mother-Adolescent Closeness: Chi-square Analysis Summary

Variable Category	Variable	N	Pearson Chi-square	df
Time Spent Together	Went shopping together in past 4 weeks	185	19.622* [#]	1
	Played a sport together in past 4 weeks	185	.211 [#]	1
	Attended a religious service/church event together in past 4 weeks	185	2.393 [#]	1
	Went to a movie/play/museum/concert/sports event together in past 4 weeks	185	2.201 [#]	1
Communication	Satisfaction with mother-adolescent communication	185	67.557* [#]	1
	Talked about adolescent's social life in past 4 weeks	185	1.246	1
	Talked about adolescent's personal problem in past 4 weeks	185	.625 [#]	1
	Had a serious argument in past 4 weeks	185	.213 [#]	1
Goals and Academics	Projected maternal disappointment if adolescent does graduate from college	185	.146	1
	Projected maternal disappointment if adolescent does not graduate from high school	186	.319 [#]	1
	Talked about school work/grades in past 4 weeks	185	.161	1
	Worked on a school project together in past 4 weeks	185	.211 [#]	1
	Talked about other things adolescent has been doing in school in past 4 weeks	185	1.062	1
Warmth and Emotional Support	Mother is warm and loving	186	36.352* [#]	1
	Mother encourages independence	185	9.538* [#]	1
	When adolescent does something wrong, mother talks to him about it and helps him understand why it is wrong (Mom_DiscussesEthics)	184	13.668* [#]	1

* p < 0.05

[#] Cells with expected counts of less than 5 > 0

Per the Chi-square crosstabulation, there was a positive association between perceived levels of maternal-adolescent closeness and shopping as a shared activity between mothers and adolescent sons. A positive association also existed between respondents who expressed satisfaction with their communication with their mothers and high levels of maternal adolescent closeness. Finally, actual counts exceeded expected counts for the all of the variables measuring warmth and emotional support among respondents who reported higher perceived levels of maternal adolescent-closeness. Therefore, there was a positive association between higher levels of closeness and the three warmth and emotional support variables.

Maternal care. Several Chi-square analyses were conducted using SPSS software to address the following research question: *Which factors contribute to perceived levels of maternal care?* These tests determined the association between several variables (see Table 5, ‘Variable’ column) and adolescents’ perceptions of how much their mothers care about them. Two of these analyses revealed statistically significant findings: (a) satisfaction with mother-adolescent communication ($p = .000$) and (b) tendency of the mother to discuss the ethics of adolescent behavior ($p = .020$). Since the p-values for these two variables were less than .05, these analyses rejected the null hypothesis of no association for these two features of care; there was an association between the two factors listed above and adolescents’ perceptions of maternal care. For all other statistical tests in this series, the study failed to reject the null hypothesis of no association. Table 5 shows the results of the analyses.

Table 5. Features of Maternal Care: Chi-square Analysis Summary

Variable Category	Variable	N	Pearson Chi-square	df
Time Spent Together	Went shopping together in past 4 weeks	185	3.381 [#]	1
	Played a sport together in past 4 weeks	185	.854 [#]	1
	Attended a religious service/church event together in past 4 weeks	185	2.011 [#]	1
	Went to a movie/play/museum/concert/sports event together in past 4 weeks	185	.007 [#]	1
Communication	Satisfaction with mother-adolescent communication	185	13.225* [#]	1
	Talked about adolescent’s social life in past 4 weeks	185	2.662 [#]	1
	Talked about adolescent’s personal problem in past 4 weeks	185	.706 [#]	1
	Had a serious argument in past 4 weeks	185	.054 [#]	1
Goals and Academics	Projected maternal disappointment if adolescent does not graduate from college	185	.152 [#]	1
	Projected maternal disappointment if adolescent does not graduate from high school	186	.680 [#]	1
	Talked about school work/grades in past 4 weeks	185	1.501 [#]	1
	Worked on a school project together in past 4 weeks	185	.854 [#]	1
	Talked about other things adolescent is doing in school in past 4 weeks	185	.118 [#]	1
Warmth and Emotional Support	Mother is warm and loving	186	7.055 [#]	1
	Mother encourages independence	185	.099 [#]	1

	When adolescent does something wrong, mother talks to him about it and helps him understand why it is wrong (Mom_DiscussesEthics)	184	5.403*#	1
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* $p < 0.05$

Cells with expected counts of less than 5 > 0

The count of respondents reporting higher perceived levels of maternal care and higher satisfaction with mother-adolescent communication exceeded the expected count (count = 159; expected count = 156.5). The same trend was apparent for the second statistically significant variable (‘Mom_DiscussesEthics’); 152 respondents reported higher perceived levels of maternal care and higher occurrence of ethics-based conversations with their mothers, as compared with the expected count of 150.5.

Father-adolescent closeness. Several Chi-square analyses were conducted using SPSS software to address the following research question: *Which factors contribute to perceived levels of paternal-adolescent closeness?* These tests determined the association between several variables (see Table 6, ‘Variable’ column) and closeness between fathers and their adolescent sons. Two of these analyses revealed statistically significant findings: (a) satisfaction with father-adolescent communication ($p = .000$) and (b) the adolescent’s perception of his father as warm and loving ($p = .000$). Since the p-values for these two variables were less than .05, these analyses rejected the null hypothesis of no association for these features; there was a positive association between the two factors listed above and perceptions of paternal-adolescent closeness. For all other statistical tests in this series, the study failed to reject the null hypothesis of no association. Table 6 shows the results of the analyses.

Table 6. Features of Father-Adolescent Closeness: Chi-square Analysis Summary

Variable Category	Variable	N	Pearson Chi-square	df
Time Spent Together	Went shopping together in past 4 weeks	152	2.472	1
	Played a sport together in past 4 weeks	152	2.711	1
	Attended a religious service/church event together in past 4 weeks	152	.041	1
	Went to a movie/play/museum/concert/sports event together in past 4 weeks	152	.013	1

Communication	Satisfaction with father-adolescent communication	152	36.750*	1
	Talked about adolescent's social life in past 4 weeks	152	.003	1
	Talked about adolescent's personal problem in past 4 weeks	152	.170 [#]	1
	Had a serious argument in past 4 weeks	152	.170 [#]	1
Goals and Academics	Projected paternal disappointment if adolescent does not graduate from college	152	2.873	1
	Projected paternal disappointment if adolescent does not graduate from high school	152	.052 [#]	1
	Talked about school work/grades in past 4 weeks	152	3.271	1
	Worked on a school project together in past 4 weeks	152	.146 [#]	1
	Talked about other things adolescent is doing in school in past 4 weeks	152	.722	1
Warmth and Emotional Support	Father is warm and loving	152	20.417* [#]	1

* p < 0.05

[#] Cells with expected counts of less than 5 > 0

Paternal care. Several Chi-square analyses were conducted using SPSS software to address the following research question: *Which factors contribute to perceived levels of paternal care?* These tests determined the association between several variables (see Table 7, 'Variable' column) and adolescents' perceptions of how much their fathers care about them. A single test in this series revealed statistically significant findings: the adolescent's perception of his father as warm and loving ($\chi^2 = 6.712, p = .010$). Due to this p-value of less than .05, this study rejected the null hypothesis of no association between these two variables. Counts revealed that there was a positive association between an adolescent's assessment of his father as warm and loving and perceived levels of paternal care. For all other statistical tests in this series, the study failed to reject the null hypothesis of no association. Table 7 shows the results of the analyses.

Table 7. Features of Paternal Care: Chi-square Analysis Summary

Variable Category	Variable	N	Pearson Chi-square	df
Time Spent Together	Went shopping together in past 4 weeks	152	.911 [#]	1
	Played a sport together in past 4 weeks	152	.017 [#]	1
	Attended a religious service/church event together in past 4 weeks	152	.594 [#]	1

	Went to a movie/play/museum/concert/sports event together in past 4 weeks	152	.496 [#]	1
Communication	Satisfaction with father-adolescent communication	152	.193 [#]	1
	Talked about adolescent's social life in past 4 weeks	152	.042 [#]	1
	Talked about adolescent's personal problem in past 4 weeks	152	.037 [#]	1
	Had a serious argument in past 4 weeks	152	1.536 [#]	1
Goals and Academics	Projected paternal disappointment if adolescent does not graduate from college	152	.630 [#]	1
	Projected paternal disappointment if adolescent does not graduate from high school	152	1.612 [#]	1
	Talked about school work/grades in past 4 weeks	152	2.171 [#]	1
	Worked on a school project together in past 4 weeks	152	.250 [#]	1
	Talked about other things adolescent is doing in school in past 4 weeks	152	.465 [#]	1
Warmth and Emotional Support	Father is warm and loving	152	6.712 ^{*#}	1

* p < 0.05

Cells with expected counts of less than 5 > 0

Features of parental/family care. A sequence of three Chi-square analyses was conducted using SPSS software to determine if there was an association between three family variables (see Table 8, 'Variable' column) and perceptions of parental care. This sequence of tests responded to the research question: *What variables contribute to perceived levels of parental care among Mexican American adolescent sons?* As indicated in Table 8, all three tests were statistically significant (p < .05), so the null hypothesis of no association was rejected for all variables in this section. There were positive associations between perceptions of parental care and (a) whether an adolescent feels understood by his family (p = .006), (b) whether an adolescent believes his family has fun together (p = .000), and (c) whether an adolescent feels that his family pays attention to him (p = .000).

Table 8. Features of Parental/Family Care: Chi-square Analysis Summary

Variable	N	Pearson Chi-square	df
Family understands you	198	7.425 ^{*#}	1
Family has fun together	199	12.232 ^{*#}	1
Family pays attention to you	199	18.058 ^{*#}	1

* p < 0.05

Cells with expected counts of less than 5 > 0

Counts were greater than expected counts among respondents who indicated both higher parental care and higher perceptions of family understanding as well as among respondents who indicated both lower parental care and lower perceptions of family understanding. This trend was apparent for all three variables measuring family care.

Correlation: Emotional Health

This study hypothesized a relationship between scores on the Feelings Scale and scores on the SEMH Scale. A correlation analysis was completed to determine the strength and direction of the relationship between scores on these two scales. The Pearson Correlation was .392 and the Significance (1-tailed) value was .000. Consequently, there was a statistically significant, moderate, positive correlation between scores on these two emotional health scales. A visual representation of this relationship appears in Chart 1.



Tests of Association: Emotional Health

Several tests of association were completed to examine the relationship between features of closeness and care and emotional health scale scores. The results of these statistical tests are summarized below.

Impact of features of maternal closeness/care on emotional health. Several Chi-square analyses were conducted using SPSS software to determine the association between features of maternal closeness/care and emotional health outcomes. These tests collectively responded to the research question: *What is the relationship between features of maternal closeness/care and adolescent emotional health outcomes?* Each variable explored in previous sections as a potential factor in maternal closeness or care was tested for association with both the Feelings Scale and the SEMH Scale. Recoding of variables was consistent with previous sections and tests. Results for this series of Chi-square analyses appear in Table 9.

Table 9. Impact of Features of Maternal Closeness/Care on Emotional Health: Chi-square Analysis Summary

Variable Category	Variable	<i>Feelings Scale</i> N	<i>SEMH Scale</i> N	<i>Feelings Scale</i> Pearson Chi-square	<i>SEMH Scale</i> Pearson Chi-square	<i>Feelings Scale</i> df	<i>SEMH Scale</i> df
Time Spent Together	Went shopping together in past 4 weeks	185	184	2.260	.128 [#]	1	1
	Played a sport together in past 4 weeks	185	184	.082	.627 [#]	1	1
	Attended a religious service/church event together in past 4 weeks	185	184	.256	.128 [#]	1	1
	Went to a movie/play/museum/concert/sports event together in past 4 weeks	185	184	.090	1.567 [#]	1	1
Communication	Satisfaction with mother-	185	183	1.521	9.358* [#]	1	1

	adolescent communication						
	Talked about adolescent's social life in past 4 weeks	185	184	.355	.598 [#]	1	1
	Talked about adolescent's personal problem in past 4 weeks	185	184	9.799*	2.307 [#]	1	1
	Had a serious argument in past 4 weeks	185	184	.016	.264 [#]	1	1
Goals and Academics	Projected maternal disappointment if adolescent does not graduate from college	185	183	5.517*	.000 [#]	1	1
	Projected maternal disappointment if adolescent does not graduate from high school	186	184	.323 [#]	3.840* [#]	1	1
	Talked about school work/grades in past 4 weeks	185	184	.965	2.612 [#]	1	1
	Worked on a school project together in past 4 weeks	185	184	1.263 [#]	.627 [#]	1	1
	Talked about other things adolescent is doing in school in past 4 weeks	185	184	7.068*	3.699 [#]	1	1
Warmth and Emotional Support	Mother is warm and loving	186	184	3.387 [#]	.519 [#]	1	1
	Mother encourages independence	185	183	.665 [#]	5.830 [#]	1	1
	When adolescent does something wrong, mother talks to him about it and helps him understand why it	184	182	9.316* [#]	.046 [#]	1	1

	is wrong (Mom_Discusses Ethics)						
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* p < 0.05

Cells with expected counts of less than 5 > 0

Statistically significant associations existed between Feelings Scale scores and (a) talking about an adolescent’s personal problem ($\chi^2 = 9.799, p = .002$), (b) perceived maternal disappointment if the adolescent does not graduate from college ($\chi^2 = 5.517, p = .019$), (c) talking about things the adolescent is doing in school besides school work and grades ($\chi^2 = 7.068, p = .008$), and (d) tendency of the mother to discuss the ethics of adolescent behavior ($\chi^2 = 9.316, p = .002$). Lower Feelings Scale scores indicated more positive feelings, while higher scores on this scale indicated more negative feelings. Positive associations existed between low Feelings Scale scores and (a) not discussing personal problems, (b) higher anticipated maternal disappointment if the adolescent does not graduate from college, (c) talking about school activities other than work and grades, and (d) discussing the ethics of an adolescent’s behavior with his mother.

There were also statistically significant associations between SEMH Scale scores and (a) satisfaction with mother-adolescent communication ($\chi^2 = 9.358, p = .002$) and (b) projected maternal disappointment if the adolescent does not graduate from high school ($\chi^2 = 3.840, p = .050$). Lower SEMH scores signified higher self-esteem and more positive mental health indicators; higher scores indicated the opposite. There was a positive association between lower scores on the SEMH scale and (a) greater satisfaction with mother-adolescent communication and (b) higher anticipated maternal disappointment if the adolescent does not graduate from high school.

Impact of features of paternal closeness/care on emotional health. Several Chi-square analyses were conducted using SPSS software to determine the association between features of paternal closeness/care and emotional health outcomes. These tests collectively responded to the research question: *What is the relationship between features of paternal*

closeness/care and adolescent emotional health outcomes? Each variable explored in previous sections as a potential factor in paternal closeness or care was tested for association with the Feelings Scale and the SEMH Scale. Results appear in Table 10.

Table 10. Impact of Features of Paternal Closeness/Care on Emotional Health: Chi-square Analysis Summary

Variable Category	Variable	<i>Feelings Scale</i> N	<i>SEMH Scale</i> N	<i>Feelings Scale</i> Pearson Chi-square	<i>SEMH Scale</i> Pearson Chi-square	<i>Feelings Scale</i> df	<i>SEMH Scale</i> df
Time Spent Together	Went shopping together in past 4 weeks	152	150	4.003*	.170 [#]	1	1
	Played a sport together in past 4 weeks	152	150	1.286	1.875 [#]	1	1
	Attended a religious service/church event together in past 4 weeks	152	150	.009	.077 [#]	1	1
	Went to a movie/play/museum/concert/sports event together in past 4 weeks	152	150	1.858 [#]	1.159 [#]	1	1
	Satisfaction with father-adolescent communication	152	150	7.154*	5.128* [#]	1	1
Communication	Talked about adolescent's social life in past 4 weeks	152	150	.002	.037 [#]	1	1
	Talked about adolescent's personal problem in past 4 weeks	152	150	1.531 [#]	1.027 [#]	1	1
	Had a serious argument in past 4 weeks	152	150	3.157 [#]	.064 [#]	1	1
Goals and Academics	Projected paternal disappointment if adolescent does not graduate from college	152	150	9.207*	.148 [#]	1	1

	Projected paternal disappointment if adolescent does not graduate from high school	152	150	.425 [#]	.351 [#]	1	1
	Talked about school work/grades in past 4 weeks	152	150	2.389	.775 [#]	1	1
	Worked on a school project together in past 4 weeks	152	150	.747 [#]	.491 [#]	1	1
	Talked about other things adolescent is doing in school in past 4 weeks	152	150	4.722*	.282 [#]	1	1
Warmth and Emotional Support	Father is warm and loving	152	150	9.454* [#]	14.570* [#]	1	1

* p < 0.05

[#] Cells with expected counts of less than 5 > 0

Statistically significant associations were found between Feelings Scale scores and (a) going shopping with the adolescent’s resident father in the last four weeks ($\chi^2 = 4.003, p = .045$), (b) satisfaction with father-adolescent communication ($\chi^2 = 7.154, p = .007$), (c) projected paternal disappointment if the adolescent does not graduate from college ($\chi^2 = 9.207, p = .002$), (d) talking about things the adolescent is doing in school besides school work and grades ($\chi^2 = 4.722, p = .030$), and (e) perceptions of the father as warm and loving ($\chi^2 = 9.454, p = .002$). These findings indicated positive associations between lower scores on the Feelings Scale (more positive feelings) and (a) going shopping with the resident father, (b) higher satisfaction with father-adolescent communication, (c) higher anticipated paternal disappointment if the adolescent does not graduate from college, (d) talking about school activities besides work and grades, and (e) adolescents’ perception of their fathers as warm and loving. Counts exceeded expected counts for all of these variables in the crosstabulations.

There were also statistically significant associations between the SEMH Scale scores and (a) satisfaction with father-adolescent communication ($\chi^2 = 5.128, p = .024$) and (b) perceptions of the father as warm and loving ($\chi^2 = 27.690, p = .000$). The results revealed a positive association between lower scores on the SEMH Scale (indicative of higher self-esteem and better mental health outcomes) and (a) higher satisfaction with father-adolescent communication and (b) heightened perceptions of the resident father as warm and loving. Counts again exceeded expected counts in analyzing these two pairs of variables.

Impact of features of parental/family care on emotional health. A set of Chi-square analyses was conducted using SPSS software to determine the association between features of parental care and emotional health outcomes. These tests collectively responded to the research question: *What is the relationship between features of parental care and adolescent emotional health outcomes?* Three distinct features of parental care (family understanding, family fun, and family attention) were tested for association with the Feelings Scale and the SEMH Scale. Variable recoding was consistent with previous sections and tests. Results appear in Table 11.

Table 11. Impact of Features of Parental/Family Closeness/Care on Emotional Health

	<i>Feelings Scale</i>	<i>SEMH Scale</i>	<i>Feelings Scale</i>	<i>SEMH Scale</i>	<i>Feelings Scale</i>	<i>SEMH Scale</i>
Variable	N	N	Pearson Chi-square	Pearson Chi-square	df	df
Family understands you	199	196	11.969*	2.686 [#]	1	1
Family has fun together	200	197	1.796	2.830 [#]	1	1
Family pays attention to you	200	197	5.492*	6.243* [#]	1	1

* $p < 0.05$

[#] Cells with expected counts of less than 5 > 0

Three of the statistical tests in this section yielded statistically significant associations. These tests indicated an association between scores on the Feelings Scale and whether an adolescents feels (a) understood by his family ($\chi^2 = 11.969, p = .001$) and that (b) his family pays attention to him ($\chi^2 = 5.492, p = .019$). These findings revealed a positive association between

lower scores on the Feelings Scale (more positive feelings) and (a) a greater sense of being understood by the family as well as (b) a greater sense that the family pays attention to the adolescent.

There was also a statistically significant association between scores on the SEMH Scale and the adolescent's perception that his family pays attention to him ($\chi^2 = 6.243$, $p = .012$). This finding indicated a positive association between lower Feelings Scale scores and a greater sense that the family pays attention to the adolescent.

Independent Samples T-Tests

Mother-adolescent closeness. Independent samples t-tests were conducted to compare scores on three scales (Feelings, SEMH, and Shared Activities Scales) between individuals who reported lower levels of mother-adolescent closeness and individuals who reported higher levels of mother-adolescent closeness. Results are shown in Table 12.

The Significance (2-tailed) values for the Feelings and SEMH Scale score comparisons were .001 and .004 respectively. Since these values were less than .05, there was a statistically significant difference in scores on these scales between individuals reporting low versus high levels of closeness to their resident mothers. The means for individuals reporting lower levels of closeness were higher than the means for individuals reporting higher levels of closeness on both of these scales. Higher scores on the Feelings Scale indicate more negative feelings, and higher scores on the SEMH Scale represented lower self-esteem or poorer mental health indicators. Consequently, individuals who reported feeling closer to their resident mothers also reported more positive feelings and higher self-esteem and mental health indicators.

The independent samples t-test measuring differences in scores on the Shared Activities Scale did not yield a statistically significant difference in mean scores, as the Significance (2-tailed) value was greater than .05 ($p = .059$). Therefore, there was not a statistically significant

difference in the number of shared activities between individuals reporting lower levels of closeness and those reporting higher levels of closeness to their resident mothers.

Table 12. Independent Samples T-Test Results: Grouping Variable = Mother-Adolescent Closeness

Test Variable	N (Low Closeness)	N (High Closeness)	Mean (Low Closeness)	Mean (High Closeness)	Mean Difference	t
Feelings Scale	14	171	16.2143	10.5497	5.66458	3.268*
SEMH Scale	14	170	25.4286	20.7000	4.72857	2.906*
Shared Activities Scale	14	171	2.3571	3.4795	-1.12239	-.1898

* p < 0.05

Maternal care. The same series of independent samples t-tests were repeated for individuals reporting higher and lower levels of maternal care. The results of these tests are displayed in Table 13. None of these tests yielded statistically significant results, as the Significance (2-tailed) value was greater than .05 in all cases. Consequently, there was no statistically significant difference in average scores on the Feelings Scale, SEMH Scale, or Shared Activities Scale between individuals reporting lower levels of maternal care and individuals reporting higher levels of maternal care.

Table 13. Independent Samples T-Test Results: Grouping Variable = Maternal Care

Test Variable	N (Low Care)	N (High Care)	Mean (Low Care)	Mean (High Care)	Mean Difference	t
Feelings Scale	4	181	14.7500	10.8950	3.85497	1.193
SEMH Scale	4	180	23.7500	21.0000	2.75000	.911
Shared Activities Scale	4	181	3.2500	3.3978	-.14779	-.136

* p < 0.05

Father-adolescent closeness. Independent samples t-tests were conducted to compare scores on three scales (the Feelings, SEMH, and Shared Activities Scales) between individuals who reported lower levels of father-adolescent closeness and individuals who reported higher levels of father-adolescent closeness. Results are show in Table 14.

Results of these tests showed a similar pattern to the same series of tests for mother-adolescent closeness. There was a statistically significant difference in the mean scores on the Feelings Scale (Sig. [2-tailed] = .004) and the SEMH Scale (Sig. [2-tailed] = .023) but not on the Shared Activities Scale between individuals who reported lower levels of father-adolescent closeness and those who reported higher levels of father-adolescent closeness.

Table 14. Independent Samples T-Test Results: Grouping Variable = Father-Adolescent Closeness

Test Variable	N (Low Closeness)	N (High Closeness)	Mean (Low Closeness)	Mean (High Closeness)	Mean Difference	t
Feelings Scale	24	126	15.3750	10.2698	5.10516	3.887*
SEMH Scale	24	126	24.7083	20.5238	4.18452	2.417*
Shared Activities	24	128	2.1667	2.9297	-.76302	-1.628

* p < 0.05

Paternal care. The same series of independent samples t-tests were repeated for individuals reporting higher and lower levels of paternal care. The results of these tests are displayed in Table 15. As with maternal care t-tests, none of these tests yielded statistically significant results, as the Significance (2-tailed) value was greater than .05 in all cases. Consequently, there was no statistically significant difference in average scores on the Feelings Scale, SEMH Scale, or Shared Activities Scale between individuals reporting lower levels of paternal care and individuals reporting higher levels of paternal care.

Table 15. Independent Samples T-Test Results: Grouping Variable = Paternal Care

Test Variable	N (Low Care)	N (High Care)	Mean (Low Care)	Mean (High Care)	Mean Difference	t
Feelings Scale	6	144	13.1667	11.0000	2.16667	.842
SEMH Scale	6	144	23.6667	21.0903	2.57639	1.052
Shared Activities Scale	6	146	2.3333	2.8288	-.49543	-.356

* p < 0.05

Parental care. Independent samples t-tests were conducted to compare scores on three scales (Feelings Scale, Self-Esteem/Mental Health Scale, and Parental Monitoring Scale) between respondents reporting low levels of parental care and respondents reporting high levels of

parental care. Results are shown in Table 16. There was a statistically significant difference in mean scores on the SEMH Scale between adolescents reporting high versus low levels of parental care (Sig. [2-tailed] = .002). Individuals reporting higher levels of perceived parental care also demonstrated a lower mean score on the SEMH Scale; a lower score on this scale denotes higher self-esteem and better mental health indicators.

Table 16. Independent Samples T-Test Results: Grouping Variable = Parental Care

Test Variable	N (Low Care)	N (High Care)	Mean (Low Care)	Mean (High Care)	Mean Difference	t
Feelings Scale	9	189	16.2222	10.6984	5.52381	1.780
SEMH Scale	9	188	27.0000	20.9787	6.02128	3.069*
Parenting Monitoring Scale	7	187	5.0000	4.8877	.11230	.161

* $p < 0.05$

Activities/experiences shared with mother. Independent samples t-tests were conducted to compare scores on two scales (Feelings Scale and SEMH Scale) between respondents reporting fewer shared experiences or activities and those reporting more shared experiences or activities with their resident mothers. Results are shown in Table 17. There was a statistically significant difference in mean scores on the SEMH Scale between adolescents reporting high versus low quantities of shared experiences (Sig. [2-tailed] = .002). Adolescents reporting more shared activities with their resident mothers also had a lower mean score on the SEMH Scale, suggestive of higher self-esteem and better mental health indicators.

Table 17. Independent Samples T-Test Results: Grouping Variable = Activities Shared with Mother

Test Variable	N (Fewer Shared Activities)	N (More Shared Activities)	Mean (Fewer Shared Activities)	Mean (More Shared Activities)	Mean Difference	t
Feelings Scale	151	33	11.0066	10.7879	.21874	.177
SEMH Scale	151	33	21.7020	18.1212	3.58077	3.200*

* $p < 0.05$

Activities/experiences shared with father. Independent samples t-tests were conducted to compare scores on two scales (Feelings Scale and SEMH Scale) between respondents reporting fewer shared experiences or activities and those reporting more shared experiences or activities with their resident fathers. Results are shown in Table 18. There was a statistically significant difference in mean scores on the SEMH Scale between adolescents reporting larger versus smaller quantities of shared experiences (Sig. [2-tailed] = .002). Mirroring the results in Table 17 for shared activities with resident mothers, adolescent respondents who reported more shared activities with resident fathers also demonstrated a lower mean score on the SEMH scale – revealing higher self-esteem and better mental health indicators – than those who reported fewer shared activities with their resident fathers.

Table 18. Independent Samples T-Test Results: Grouping Variable = Activities Shared with Father

Test Variable	N (Fewer Shared Activities)	N (More Shared Activities)	Mean (Fewer Shared Activities)	Mean (More Shared Activities)	Mean Difference	t
Feelings Scale	130	20	11.0538	11.3000	-.24615	-.166
SEMH Scale	130	20	21.7769	17.4000	4.37692	3.193*

* p < 0.05

Parental monitoring. Independent samples t-tests were conducted to compare scores on two scales (Feelings Scale and SEMH Scale) between adolescent respondents reporting more parental monitoring (parents allowed them to make fewer decisions on their own) and those reporting less parental monitoring (parents allowed them to make more decisions on their own). Results are shown in Table 19. None of these tests yielded statistically significant results, as the Significance (2-tailed) value was greater than .05 in all cases. Consequently, there was no statistically significant difference in average scores on the Feelings Scale or SEMH Scale between individuals reporting less parental monitoring and individuals reporting more parental monitoring.

Table 19. Independent Samples T-Test Results: Grouping Variable = Parental Monitoring

Test Variable	N (Less Monitoring)	N (More Monitoring)	Mean (Less Monitoring)	Mean (More Monitoring)	Mean Difference	t
Feelings Scale	156	39	10.7051	12.2821	1.57692	1.381
SEMH Scale	156	38	20.9103	22.3947	1.48448	1.597

* $p < 0.05$

Limitations to Significance

In summarizing the findings of this study, it is important to make note of an important limitation. Despite recoding of ordinal and scale variables (see Appendix D for recoding details), several Chi-square tests still resulted in tables containing cells with expected counts of less than 5. Consequently, some of the statistically significant results may not be as significant as the p-values would otherwise indicate. Cells with expected counts of less than 5 are noted in all findings tables in this section.

Discussion

This section will review the relationship between closeness and care and highlight comparisons between maternal, paternal, and parental features of closeness and care. Next, the relationship between measures of emotional health will be considered, followed by an exploration of the differential impacts of features of closeness and care on emotional health outcomes.

Closeness and care

Perceived levels of closeness and care – especially levels of closeness – among resident mothers and resident fathers, were overwhelmingly positive among the adolescent sample in this study. However, the association between maternal closeness and care was statistically significant while the association between these measures was not significant when asking adolescents about their relationships with their fathers. This discrepancy may reflect the distinction highlighted in previous research that mothers tend to be associated with emotional support, while fathers are more likely to be cited as providing instrumental support (Crockett et al., 2007; McKinney &

Renk, 2011). In these previous studies, adolescents characterize their fathers as caring by way of indirect means, such as working long hours to support the family. Such a conceptualization of care would not necessarily coincide with feelings of closeness. Moving forward in this analysis, maternal and paternal variables will thus be considered in a comparative fashion.

Features of Closeness: A Comparison of Mothers and Fathers

Time spent together. The only statistically significant result for either mothers or fathers in this category was the association between mother-adolescent closeness and adolescents reporting that they went shopping with their mothers in the four weeks prior to the interview. It is first worth noting that this month-long time frame may be a restriction in and of itself to a generalizable representation of time spent together. That said, these results again mandate a closer look at the concept of instrumental support (Crockett et al., 2007). Activity-based indicators of positive relationships may not necessarily be those that require the adolescent and parent to engage in an activity together; Crockett and colleagues (2007) specifically note the focus of adolescents on activities done for them rather than with them, such as cooking, cleaning, or caring for them when they are ill. Furthermore, although Mexican American adolescent sons cite the importance of shared activities, particularly with their fathers (Crockett et al., 2007), these activities are more closely associated with the language of care rather than closeness.

Communication. The analyses revealed statistically significant positive associations between perceived closeness and satisfaction with communication for both mothers and fathers; these findings reflect previous research trends that good communication goes hand in hand with positive, healthy parent-adolescent relationships (Brody et al., 2005; Crockett et al., 2007). Interestingly, no significant associations were found between closeness and the type of communication (e.g. talking, arguing) or between closeness and the topic of communication (e.g. social life, personal problem). The measure of satisfaction may be the only statistically significant result because these parent-adolescent dyads were not consistently – or at least not

within the variables' four week time frame – discussing personal problems or having serious arguments.

Goals and academics. No variables in this category yielded statistically significant results. The main source of previous research on this theme (Crockett et al., 2007) focuses on goals and academics as a feature of care among fathers, which may help to explain the lack of significant results in this category for mothers. However, in regards to fathers, Crockett and colleagues (2007) highlight the importance of this category as an element of paternal care, rather than paternal closeness. This detail, combined with the lack of statistically significant association between closeness and care among fathers, may explain why an association with closeness does not exist. It is also important to recognize a discovered limitation of this theme, namely that the variables in this category may actually measure features beyond or in addition to goals and academics. For instance, disappointment in the adolescent not graduating from high school or college could be more about specific family values, such as representing the family well or making a better life for oneself. Likewise, the variable of talking about “other things related to the adolescent’s school” could also have little to do with goals and academics; rather, this variable may speak to conversations about peer relationships, sports, etc. Consequently, the component variables in this category may have been more disconnected from the overall theme than originally perceived. The Future Research section will address is issue.

Warmth and emotional support. Not surprisingly, all variables measuring warmth and emotional support for mothers and fathers showed a statistically significant relationship with closeness to that parent. These findings are in keeping with previous research; warmth and emotional support is one of the most widely cited themes of positive, close parent-adolescent relationships (Bogensneider & Pallock, 2008; Brody et al., 2005; Crockett et al., 2007; Fletcher et al., 2004; Repinski & Zook, 2005).

Features of Care: A Comparison of Mothers and Fathers

Time spent together. There were no statistically significant associations between maternal or paternal care and variables measuring time spent together. As discussed in the Features of Closeness section above, this may be indicative of the value placed on parents doing something for their adolescents, rather than activities done together (Crockett et al., 2007). Furthermore, as noted in the Limitations section, these results demand a consideration of cultural specificity. The Add Health interview questions were not designed solely for use with Mexican Americans males. Consequently, the individual variables in this theme may not represent the way Mexican American adolescent sons would ordinarily spend time with their parents; given the cultural institutions of *respeto* and *familismo*, shared activities might involve paid work to support the family, caring for younger children or elders, or participating in community events together. This lack of cultural specificity should be considered throughout this discussion and will be addressed further in the Future Research section.

Communication. A single statistically significant association existed for this category between satisfaction with mother-adolescent communication and maternal care. Previous research supports the role of communication in healthy and positive parent-adolescent relationships (Brody et al., 2005; Crockett et al., 2007). Although research addresses communication with parents broadly, it also highlights that mothers tend to take on a more emotionally supportive role, as opposed to the more indirect, action-based caretaking role of fathers (Bogenschneider & Pallock, 2008; Crockett et al., 2007; McKinney & Renk, 2011). Communication arguably aligns more closely with the type of direct, emotional care provided by mothers, which may explain the different results between mothers and fathers.

It is also meaningful to point out the statistically significant association between maternal care and tendency of mothers to discuss the ethics of their adolescents' behavior. This latter variable was a measured feature of parent-adolescent relationships in the category of warmth and

emotional support. Naturally, emotional support can be offered and perceived in a variety of ways; emotional support could take the form of a parent's presence, a shared activity, or a meaningful conversation. Therefore, this warmth and emotional support variable may reinforce the relationship between communication and maternal care.

Goals and academics. There were no statistically significant associations between maternal or paternal care and variables within this theme. The absence of these relationships is rather surprising given the findings of Crockett and colleagues (2007) that male Mexican American sons tend to experience monitoring of their academics – particularly asking about goals and school work – as indicative of paternal care. However, the research evidence for this theme comes primarily from a single study with a rather small sample size (Crockett et al., 2007). It is thus possible that the findings from this study actually reveal a more widely representative trend. The lack of association may also suggest that attention to goals and academics is a supportive, rather than a defining, feature of care. To clarify, some previous studies address goals and academics in the context of parental monitoring and control (Crockett et al., 2007; Dumka et al., 2009). This link supports the possibility that parental monitoring of goals and academics may exist as a measure of a separate or broader feature of care, rather than existing as a stand-alone theme.

Warmth and emotional support. This study revealed a statistically significant association between paternal care and perceptions of fathers as warm and loving. Paternal warmth as an indicator of care fits with research trends that emotional warmth is intimately linked to positive parent-adolescent relationships (Bogenschneider & Pallock, 2008; Brody et al., 2005; Crockett et al., 2007; Fletcher et al., 2004; Repinski & Zook, 2005). However, there was not a statistically significant association between maternal care and perceptions of mothers as warm and loving. To explore these discrepant findings, it is necessary to consider culture and gender.

Differing standards of care based on parental gender may mean that identification as warm or loving may be easier to attain or more concrete to determine for fathers based on the tangible or measurable nature of instrumental care activities. While overt demonstrations of love and affection are not expected from fathers (Crockett et al., 2007), mothers are expected to be warm and loving based on their expressive caretaking role (Bogenschneider & Pallock, 2008; Crockett et al., 2007; Fletcher et al., 2004; Ge et al., 1996). As a result of this standard, it is possible that an adolescent would only characterize his mother as warm and loving if she surpassed this already high expectation to an exceptional degree. Thus, a reverse double standard of sorts may be culturally informed. Moreover, all respondents in this study are also male. As such, they are expected within their culture to become instrumental care providers and protectors (Denner & Dunbar, 2004; HHMI, 2010). It is therefore possible that they respond more to instrumental forms of care from either parent in preparation for this role.

This study also found a statistically significant positive association between maternal care and mothers discussing the ethics of their adolescents' behavior. This finding could support either bank of research explored above. The act of talking through an action with an adolescent to help him understand why what he did was wrong closely aligns with the actively engaged, emotionally supportive portrayal of mothers in previous research (Crockett et al., 2007; Dumka et al., 2009). However, discussing ethics could also fall into the traditionally paternal role of problem solving and conflict resolution (McKinney & Renk, 2011), reinforcing the potential of instrumental support as the preferred feature of care for adolescent sons regardless of parental gender. Clearly, neither culture, parental gender, nor adolescent gender is the only factor at play.

Features of Care: The Family Unit

Statistically significant positive associations were found between levels of parental care and all three familial variables. These findings reflect the common theme in prior research of emotional support. Features of family care parallel cited features of emotional support,

specifically responsiveness and acceptance (“your family understands you”) and parents expressing interest in their adolescent children’s lives (“your family pays attention to you”) (Bogenschneider & Pallock, 2008; Brody et al., 2005; Crockett et al., 2007; Fletcher et al., 2004; Repinski & Zook, 2005; Udry et al., 1994-5). Although there is not information in previous research about adolescents perceiving greater care in relation to the amount of fun the family has together, this variable could reflect the link between good parenting and instrumental, activity-centered support (Bogenschneider & Pallock, 2008; Crockett et al., 2007). It would also be reasonable to consider the variable “your family has fun together” as an indicator of responsiveness and interest, as this feature clearly implies exchange and mutual attention. Despite significant results across the board in this section, it is valuable to mention that these associations looked at the relationship between measures of parental care and features of family life. Therefore, these results may also reflect the role of siblings or other live-in relatives in establishing feelings of understanding, fun, or attention. However, the influence of siblings and the various meanings of family are not specifically addressed in this study.

Emotional Health

This study made use of two researcher-created scales to measure emotional health, the Feelings Scale and the SEMH Scale. A statistically significant positive correlation was found between the scores on these scales. Therefore, individuals scoring lower on one scale were more likely to score lower on the other as well. This positive relationship makes sense, as one would assume that more positive feelings (signified by lower scores on the Feelings Scale) would be correlated with higher self-esteem and better mental health indicators (signified by lower scores on the SEMH Scale).

Emotional Health Outcomes: A Comparison of Mothers and Fathers

Features of closeness and care for mothers and fathers are explored below in relation to scores on the two emotional health scales.

Time spent together. The only statistically significant finding in this category was the difference in Feelings Scale scores based on whether or not adolescents and their fathers had gone shopping together in the four weeks preceding the interview. This finding again speaks to the importance of shared activities as particularly valuable in the father-son dyad (Crockett et al., 2007). Furthermore, McKinney and Renk (2011) determine that fathers tend to focus on family environment, stability, and conflict resolution; *machismo* reinforces these roles and the distance between fathers and direct activity (Dumka et al., 2009). Consequently, a direct care activity (such as going shopping together) may stand out even more to adolescent sons, invoking more positive feelings about self and situation given this additional and unprecedented attention.

Communication. There was a statistical difference in scores on the SEMH Scale based on satisfaction with mother-adolescent communication, and there were statistical differences in scores on both emotional health scales based on satisfaction with father-adolescent communication. Communication is a key feature of healthy, positive parent-adolescent relationships with parents of both genders (Brody et al., 2005; Crockett et al., 2007). Previous research indicates that positive parent-adolescent relationships can protect adolescents from a variety of internalizing symptoms (Branstetter & Cottrell; Crean, 2008; Dumka et al., 2009; Ge et al., 1996; Kuhlberg et al., 2010; McKinney & Renk, 2011; Smokowski et al., 2009). Given that the emotional health scales used in this study focused strongly on internalizing symptoms, the significant results in this section are well supported and expected. Taking these past and present findings into account and considering the emotionally supportive maternal role (Crockett et al., 2007; Dumka et al., 2009), it is also fitting that there would be a statistically significant difference in scores on the Feelings Scale between adolescents who spoke with their mothers about a personal problem in the four weeks prior to the interview, as compared with those who did not report such an exchange.

Goals and academics. Keeping within the framework of communication, there was a statistically significant difference in Feelings Scale scores between individuals who talked about school activities besides work and grades with their resident mother or father and those who did not. Another similarity between mothers and fathers was the statistically significant difference in Feelings Scale scores based on level of projected disappointment about an adolescent not graduating from college. Adolescents perceiving lower versus higher levels of maternal disappointment about them not graduating from high school also showed statistically significant differences in SEMH Scale scores.

Although variables in the goals and academics category did not surface as significant features of closeness or care, the possibility again exists that talking about school activities and perceived parental disappointment regarding an adolescent's future may reflect other features of positive parent-adolescent relationships, thus still influencing emotional health outcomes. For instance, talking about school activities may be more about the importance of communication than the focus on academics; the role of communication in promoting emotional health outcomes is discussed in the previous section. Similarly, disappointment regarding whether an adolescent graduates from high school or college could be less about academics and more about support, including responsiveness or interest in the adolescent's life. Such factors have been shown to decrease behavioral and psychological symptoms among adolescents (Bogenschneider & Pallock, 2008; Brody et al., 2005; Crockett et al., 2007; Fletcher et al., 2004; Ge et al., 1996; Repinski & Zook, 2005). The association between parental responsiveness and follow-through on goals (Bogenschneider & Pallock, 2008) further suggests that this theme may be a component of broader parental attention to adolescents and their experiences.

Finally, features in this category might also say more about cultural values and expectations than about the basic importance of academic achievements. Graduation could be seen as a means by which an adolescent will be able to give back to the family or community, the

central focus of *familismo* (Crean, 2008; HHMI, 2010). Academic milestones also align with the values promoted by *machismo*, including independence, autonomy, knowledge, and ability (McDonald et al., 2005; Murillo, 1976).

Warmth and emotional support. There were statistically significant differences in scores on both emotional health scales between adolescents who perceived their fathers as more or less loving and warm. There was also a statistically significant difference in scores on the Feelings Scale between individuals whose mothers were more or less likely to discuss the ethics of an adolescent's wrongdoing; as mentioned above, this feature is compatible with the emotionally engaged maternal role. It is understandable that these features would produce differing scores given that warmth and emotional support are found to address a wide range of potentially harmful issues, including depression, anxiety, conduct issues, and substance use (Fletcher et al., 2004; Ge et al., 1996). Decreased problem behaviors and improved functioning are also associated with emotional tone, a measure of "strong, positive emotions" much like the elements of the Feelings Scale (Repinski & Zook, 2005, p. 98).

Closeness and care. Having examined the relationships between emotional health outcomes and individual features of closeness and care, these central subjects also demand a more thorough look. This study found statistically significant differences in scores on both emotional health scales between adolescents indicating lower and higher parent-adolescent closeness; this trend was consistent for both mothers and fathers. However, there were not statistically significant differences in scores on either of the emotional health scales or for either parent when comparing lower and higher levels of perceived care. This discrepancy between closeness and care parallels the fewer statistically significant associations for features of closeness than for features of care; there were five significant associations for mother-adolescent closeness versus two for maternal care, and there were two significant associations for father-adolescent closeness versus one for paternal care. These findings suggest that perceptions of closeness may have a

more powerful impact on emotional health than perceptions of care. It also appropriate to revisit the two distinct types of parental support identified in previous research: expressive (Bogenschneider & Pallock, 2008; Crockett et al., 2007; Fletcher et al., 2004; Ge et al., 1996; McKinney & Renk, 2011; Repinski & Zook, 2005) and instrumental (Bogenschneider & Pallock, 2008; Crockett et al., 2007; Fletcher et al., 2004; Ge et al., 1996; McKinney & Renk, 2011; Repinski & Zook, 2005). It is feasible that an adolescent would feel that his parent cared through instrumental support without feeling the closeness that comes with expressive or emotions-centered support. By its very nature, this type of activity-centered care may not have as strong an impact on emotional health outcomes.

Shared activities scale. There were no statistically significant differences in scores on the Shared Activities Scale based on perceptions of closeness or care with resident mothers or fathers. These findings also reflect the very minimal number of statistically significant associations within the category of time spent together. By contrast, there were statistically significant differences in SEMH Scale scores between adolescents reporting fewer versus more shared activities with a resident parent; this difference was consistent for mothers and for fathers. It follows, then, that time spent together may be a protective feature broadly, rather than specifically. In other words, it is perhaps not what activity an adolescent and his parent do together that matters most, but rather the act of spending time with one another. Previous research reinforces the importance of activity-centered parental support, which lends itself to more positive parent-adolescent relationships and presumably to higher self-esteem and better mental health outcomes (Barber & Buehler, 1996; Crean, 2008; Kuhlberg et al., 2010; McKinney & Renk, 2011; Smokowski et al., 2009). Time spent together and instrumental support are protective for the adolescent without necessarily being tied to feelings of closeness or care.

Emotional Health Outcomes: The Family Unit

There was a statistically significant difference in scores on the Feelings Scale based on the degree to which adolescents felt understood by their families. There were also statistically significant differences in scores on both emotional health scales based on the degree to which adolescents felt that their families paid attention to them. Feeling understood and attended to – both as stand-alone variables and as elements of warmth and emotional support – make for more positive parent-adolescent relationships, which in turn support better emotional health outcomes (Branstetter & Cottrell; Crean, 2008; Dumka et al., 2009; Ge et al., 1996; Kuhlberg et al., 2010; McKinney & Renk, 2011; Smokowski et al., 2009). There was also a statistically significant difference in scores on the SEMH Scale between individuals reporting lower and higher levels of parental care. The relationship between parental care and emotional health is thoroughly explored in previous sections and research (Bogenschneider & Pallock, 2008; Crockett et al., 2007; Fletcher et al., 2004; Ge et al., 1996; McKinney & Renk, 2011; Repinski & Zook, 2005).

There were far more statistically significant findings among parental variables than among either maternal or paternal variables throughout this study. This trend relates to the previous proposal that respondents may look for the same features in both parents regardless of parental gender (see Features of Care: A Comparison of Mothers and Fathers: Warmth and emotional support) and may thus be better able to conceptualize meanings of care and relationship features when considering parents as a unit. Furthermore, these results sustain the research finding that the positive effects of a supportive parental relationship can override the negative effects of a conflictive one with the opposite parent (Crean, 2008). Based on this study, an adolescent's response to a question about both parents would most likely reflect his less conflictive parental relationship, again regardless of gender, leading to quantitatively stronger and more significant findings for parental features.

Despite the protective power of parental involvement, monitoring, knowledge, and control discussed in prior studies (Crockett et al., 2007; Fletcher et al., 2004; McKinney & Renk, 2011; Repinski & Zook, 2005), there was no statistically significant difference in scores on either emotional health scale for individuals reporting higher or lower levels of parental monitoring. The seven features of monitoring included in the scale were very basic, every day decisions (e.g. making decisions about meals, bedtime, friends, etc.). As previously discussed in relation to the theme of goals and academics, it is possible that these variables would fit better into other broad categories that promote emotional health, such as communication and mutual understanding.

Overall Trends

The results of this study provide a more comprehensive picture of the various factors that contribute to closeness and care in parent-adolescent son relationships, as perceived by Mexican American sons. Findings tended to be similar for both resident parents; variables related to communication or warmth and emotional support were positively associated with higher perceptions of closeness and care. This trend was apparent among joint parent and family unit variables as well. In regards to emotional health outcomes, variables associated with communication, warmth, and emotional support again revealed the most significant statistical relationships with the scales measuring feelings, self-esteem, and mental health indicators. Several variables from other categories were found to have relevance in themes of communication, warmth, emotional support; these features also showed significant relationships with promising emotional health outcomes.

Future Research

This study opens the doors for extensive future research. Although the scope of Add Health allowed for a larger and more nationally representative sample of Mexican American male adolescents, it was designed for administration to adolescents of all cultural backgrounds. As

referenced on multiple occasions in the Discussion section, future research could benefit from a more culturally defined survey and study. To illustrate this point using a single theme, what are cultural measures of parental monitoring? Is monitoring truly measured in Mexican American culture by what television shows an adolescent can watch, who he spends time with, or what he is allowed to eat? Or is monitoring rather about caring for younger siblings, finishing school, or going to work at an earlier age? Integration of culturally appropriate language and expectations should be a principal consideration for all future research.

In terms of specific topics for future research, there is more to learn about the effects of gender. Although communication, warmth, and emotional support carry the greatest weight for both parents, it is still not entirely unclear how, or if, these themes differ for mothers and fathers. To explore these questions about the overall relevance of parental gender, researchers should ensure that future data collection instruments contain identical questions to assess maternal, paternal, and parental relationship features. Researchers could also directly ask adolescents to identify similarities and differences between their parents' roles to determine if there are more consistencies or discrepancies based on gender. This gendered focus could be taken even further by comparing responses between sons and daughters to determine the impact of adolescent gender as well.

Additionally, the surprising lack of significant results in the goals and academics theme could make for important future research. Given the formative nature of the school setting and the vast quantity of time that adolescents spend in school, it would be helpful to identify what sort of interaction between home and school is seen as reparative or protective for Mexican American adolescent sons. Such a study could look at specific ways that parents might get involved during or after the school day (e.g. communicating with an adolescent's teacher, helping with homework, asking about the school day, volunteering in an extra-curricular). Respondents could identify both the frequency with which these activities take place and the frequency with which

they would desire that these activities take place. Given the disconnect in this study between the goals and academics theme and its component variables, researchers would need to be vigilant about determining the various meanings of different variables. Follow-up questions would be useful to achieve this purpose; for example, respondents who reported that their parents asked about the school day could also select discussed topics from a supplemental list (e.g. class, peers, teachers, sports, extracurricular activities, grades, homework, etc.).

Ultimately, given the vast influx of Mexican American immigrants to this country since 1994, it is critical to longitudinally examine a new generation of Mexican American adolescents. A new population going through the same or similar interviews would reveal important information about the evolution of standards, expectations, and relationships among young Mexican American immigrants. Obviously, such a comparison would be a huge undertaking, but it would allow for a much more accurate representation of this growing and shifting demographic. Changes in the broader society and culture speak to the importance of these advancements.

In relation to societal changes, one key example would be evolving standards of communication. Especially because findings indicate an association between positive communication and positive parent-adolescent relationships, it is important to measure the most relevant, updated communication mechanisms. Increased use of technology in American culture, and particularly among youth, may reframe communication standards and their impact on closeness and care. Future researchers have many new questions to consider; for example, does the number of phone check-ins or text messages sent between an adolescent and his parent constitute or promote care or closeness?

Changing standards also speak to the importance of generational differences based on degree of acculturation. This study was unable to consider the impact of immigration status on meanings of closeness and care. Depending on whether the adolescent was born in or out of the United States and how long the family has been in the United States, definitions of closeness and

care may differ significantly. The strength of cultural influence in defining relationships could differ greatly from generation to generation, with older generations and newer immigrants likely retaining more attachment to their native customs. Level of acculturation of each generation would likewise have important bearings on the way that home, school, and societal cultures interact to create closeness and care – or lack thereof – between parent and adolescent.

Given the multiple intersecting layers of influence in creating these working definitions, this next wave of research could benefit from employing more qualitative means. Quantifying relationships and nebulous terms such as closeness and care is a challenging undertaking. In order to truly represent the experience and nuanced impressions of Mexican American male adolescents, researchers should channel their direct words and voices as much as possible. While Add Health did conduct interviews, they were administered electronically and were highly standardized to ensure representation and generalizability. Future research could perhaps hone in on definitions from this study in an individual interview, family interview, or focus group format.

Implications for Practice

The themes of communication, warmth, and emotional support repeatedly revealed the most positive, significant features and outcomes across parent-adolescent relationships. Influences of gender and culture on manifestations of these themes remain apparent but understandably heterogeneous. These trends have important implications for clinical social work practice.

To begin, this study provides important insights for the development of a strong therapeutic alliance – the number one feature of successful clinical interventions across models – with the population of interest (Asay & Lambert, 1999; Bordin, 1979; Horvath & Bedi, 2002; Martin, Garske, & David, 2000). Previous research indicates that sons do not demand as much parental responsiveness as daughters (Bogenschneider & Pallock, 2008; Cota-Robles & Gamble,

2006; Crockett et al., 2007). However, this study shows that regardless of demand, male adolescents do need warmth, support, and communication – all of which are forms of parental responsiveness – to build positive relationships with parents. Armed with this awareness, clinicians have the power to create a new developmental space in which it is acceptable for male adolescents to ask for and receive what they need to build protective relationships. Especially given the importance of attachment as a foundation for this research, these findings can help the clinician use the self more effectively in session. The clinician can endorse the therapeutic alliance as an experimental space for the adolescent to explore preferences for closeness and care.

The understanding that male adolescents benefit from responsive, warm, and supportive relationships also requires attention to the cultural milieu. To avoid creating a therapeutic relationship that is incompatible with the adolescent or family's environment, the clinician must work skillfully within the contexts of *machismo*, *respeto*, and *familismo* (Ayon et al., 2010; Crockett et al., 2007; Kuhlberg et al., 2010; McDonald et al., 2005; NCLR, 2005; Smokowski et al., 2009). Rooted in ecological theory, clinicians should look for ways to balance individual client needs with the demands of the client's broader systems. For instance, the process of expressing personal needs or desires in a relationship could be reframed as a means of promoting autonomy and assertiveness, two desired outcomes of *machismo* (McDonald et al., 2005; Murillo, 1976). By working within the cultural framework, clinicians can help Mexican American families develop mutual understanding and fully reap the benefits of "culturally embedded protective factors" (Voisine et al., 2008, p. 270-271).

Correspondingly, a key feature in the creation of a strong therapeutic alliance is the development of client-specific language and definitions. Although themes of communication, warmth, and emotional support were salient as features of closeness and care in the findings, these remain expansive concepts with a multitude of meanings. The overlap between various themes reinforces the importance of allowing each client identify the unique ways in which he

experiences closeness and care. Lastly, the unanticipated findings and intersecting themes in this study highlight a foundational component of clinical service and alliance building; the clinician must remember that despite prior knowledge or experience, every client system is an exception, a compilation, and an expert.

This study also encourages and informs client education. Based on Crean's (2008) findings that a positive relationship with one parent can have protective features in managing a conflictive relationship with the opposite parent, it is important to engage and educate all caretakers in a team effort to create restorative relationships. Parents could benefit greatly from an understanding of how certain factors and interactions contribute to the emotional well being of their adolescent children. Furthermore, cultural institutions are protective if secure attachment, shared values and expectations, mutual understanding, and clear roles are all present (Branstetter & Cottrell, 2008). Therefore, to help a Mexican American family function at their ideal level, they can benefit from psychoeducation in areas such as communication skills, family structure, and role negotiation.

Genograms, ecomaps, and scales could all serve a meaningful purpose in the development of client language and the education of family members. Constructing relational diagrams individually for future comparison and dialogue, or creating them as a family unit, would provide concrete, pictorial representations of closeness and care that could serve as a starting point for communication and education, on the path to warmth and support. Furthermore, clinicians could develop scales with which family members could rate features of their family dynamics; for instance, how would you rate your family on closeness, care, attentiveness, understanding, etc.? Again, by looking at the similarities and discrepancies, the clinician and clients could determine where definitions are or are not aligning within the family unit. Such ratings would respect generational and cultural differences, as definitions of each scale item

would be derived entirely on a client-to-client basis. Imprecise relational themes, such as warmth, reinforce the need for concrete relational tools.

Clearly, there are important opportunities for use of study findings in the clinical setting, but application is even more far-reaching. These findings, and the recommended future research, could meaningfully serve other key adults in adolescents' lives. School professionals, mentors, and tutors could benefit from learning how to engage and create safe, productive environments for adolescents to develop. Like parents, these key players could benefit from education on how to improve communication and promote emotional support in a culturally sensitive and personally responsive way.

Study Summary

Given the current sociopolitical movement around immigration reform and the irrefutable population statistics over the last few decades, it is clear that the expanding presence of Mexican American adolescents in the United States will only continue to grow (Ennis et al., 2011; Kurtzleben, 2010; Motel, 2012). The need for social workers who can effectively and sensitively serve this population is thus also in high demand. In order to begin to create a sustainable means of protecting and supporting these young people in the developmental milestones of adolescence, clinicians must draw on existing strengths. One such indispensable asset is the potential of the parent-adolescent dyad to promote emotional, mental, and behavioral health (Ayon et al., 2010; Branstetter & Cottrell, 2008; Ge et al., 1996; Kuhlberg et al., 2010; McDonald et al., 2005; Smokowski et al., 2009).

This study used data from the first wave of the National Longitudinal Study of Adolescent Health to identify features of parent-adolescent relationships that promote feelings of closeness and care. The study also looked at how those features intersected with emotional health indicators. Of the five general themes explored, two – (1) communication and (2) warmth and

emotional support – surfaced most frequently and most strongly as indicative of closeness and care for both parents.

Although more and ongoing research is needed to strengthen social workers in their service to Mexican American adolescents and families, the findings of this study offer a solid foundation for creating a therapeutic alliance and supporting existing parent-adolescent relationships. Above all, this research effort rests upon the notion that each population, family, dyad, and individual has a unique culture; the first responsibility of the clinician is to learn.

References

- Add Health Research Design Waves I-IV*. [PDF document]. Retrieved from Carolina Population Center site: <http://www.cpc.unc.edu/projects/addhealth/design/slideshow/view>
- Asay, T. & Lambert, M. (1999). The empirical case for the common factors (Chapter 2). In M. Hubbles, B. Duncan and S. Miller (Eds.), *The heart and social of change: What works in therapy*. American Psychological Association: Washington, D.C.
- Ayon, C., Marsiglia, F. F., & Bermudez-Parsai, M. (2010). Latino family mental health: Exploring the role of discrimination and familismo. *Journal of Community Psychology*, 38(6), 742-756. doi: 10.1002/jcop.20392
- Barber, B. K. & Buehler, C. (1996). Family cohesion and enmeshment: Different constructs, different effects. *Journal of Marriage and Family*, 58(2), 433-441.
- Bogenschneider, K. & Pallock, L. (2008). Responsiveness in parent-adolescent relationships: Are influences conditional? Does the reporter matter? *Journal of Marriage and Family*, 1015-1029.
- Boonstra, H. (2001, June). The 'Add Health' survey: Origins, purposes and design. *The Guttmacher Report on Public Policy*, 4(3). Retrieved from <http://www.guttmacher.org/pubs/tgr/04/3/gr040310.html>
- Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy*, 16, 252-260.
- Branstetter, S. A. & Cottrell, L. (2008). Parent-adolescent relations. In F. T. L. Leong, E. M. Altmaier, & B. D. Johnson, (Eds.), *Changes and challenges for counseling in the 21st century* (321-324). Thousand Oaks, CA: Sage Publications Inc.
- Brody, G. H., Murry, V., McNair, L., Chen, Y., Gibbons, F. X., Gerrard, M., & Wills, T. (2005). Linking changes in parenting to parent-child relationship quality and youth self-control:

- The strong African American families program. *Journal of Research on Adolescence*, 15, 47-69. doi:10.1111/j.1532-7795.2005.00086.x
- Bronfenbrenner, U. (2000). Ecological Systems Theory. In Kazdin, A. E. (Ed.), *Encyclopedia of Psychology*. (Vol. 3, pp. 129-133). New York, NY: Oxford University Press.
doi:10.1037/10518-046
- Brown, L. S. & Wright, J. (2001). Attachment theory in adolescence and its relevance to developmental psychopathology. *Clinical Psychology and Psychotherapy*, 8, 15-32.
- Cota-Robles, S. & Gamble, W. (2006). Parent-adolescent processes and reduced risk for delinquency: The effect of gender for Mexican American adolescents. *Youth & Society*, 37(4), 375-392. doi: 10.1177/0044118X05282362
- Crean, H. F. (2008). Conflict in the Latino parent-youth dyad: The role of emotional support from the opposite parent. *Journal of Family Psychology*, 22(3), 484-493.
- Crockett, L. J., Brown, J., Russell, S. T., & Shen, Y-L. (2007). The meaning of good parent-child relationships for Mexican American adolescents. *Journal of Research on Adolescence*, 17(4), 639-668.
- Denner, J. & Dunbar, N. (2004). Negotiating femininity: power and strategies of Mexican American girls. *Sex Roles*, 50(5/6), 301-314.
- Dion, K. K. & Dion, K. L. (2001). Gender and cultural adaptation in immigrant families. *Journal of Social Issues*, 57(3), 511-521.
- Dumka, L. E., Gonzales, N. A., Bonds, D. D., & Millsap, R. E. (2009). Academic success of Mexican origin adolescent boys and girls: The role of mothers' and fathers' parenting and cultural orientation. *Sex Roles*, 60, 588-599. doi:10.1007/s11199-008-9518-z
- Ennis, S. R., Rios-Vargas, M. & Albert, N. G. (2011, May). The Hispanic population: 2010. *2010 Census Briefs*. U.S. Department of Commerce: Economics and Statistics Administration: U.S. Census Bureau. Retrieved from

<http://www.census.gov/prod/cen2010/briefs/c2010br-04.pdf>

Erikson, E. H. (1993). *Childhood and Society* (6th ed.). New York, NY: Norton.

Fisher, C. (2009). Center for Epidemiologic Studies Depression Scale (CES-D): An excellent free psychological screening instrument for major depression. *BMED Report*. Retrieved from <http://www.bmedreport.com/archives/7139>

Fletcher, A. C., Steinberg, L., & Williams-Wheeler, M. (2004). Parental influences on adolescent problem behavior: Revisiting Stattin and Kerr. *Child Development*, 75(3), 781-796.

Ge, X., Best, K. M., Conger, R. D., & Simons, R. L. (1996). Parenting behaviors and the occurrence and co-occurrence of adolescent depressive symptoms and conduct problems. *Developmental Psychology*, 32(4), 717-731.

Harris, K.M. (2011). Design features of Add Health. [PDF document]. *Carolina Population Center*

Harris, K. M., Halpern, C. T., Whitsel, E., Hussey, J., Tabor, J., Entzel, P., & Udry, J. R. (2009.) The National Longitudinal Study of Adolescent Health: Research Design [WWW document]. URL: <http://www.cpc.unc.edu/projects/addhealth/design>.

Harris, K. M. & Udry, J. R. (2012). National Longitudinal Study of Adolescent Health (Add Health), 1994-2008. ICPSR21600-v10. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2012-09-12. doi:10.3886/ICPSR21600.v10

Hispanic Healthy Marriage Initiative [HHMI]. (2010). Gender norms and the role of the extended family. *United States Department of Health and Human Services Administration for Children and Families*. Retrieved from http://www.acf.hhs.gov/healthymarriage/pdf/Gender_Norms.pdf

Horvath, A. O. & Bedi, R. P. (2002). The alliance. In J.C. Norcross (Ed.), *Psychotherapy relationships that work: Therapist contributions and responsiveness to patients* (pp. 37-69). New York: Oxford University Press.

ICPSR (N.D.a) Membership in ICPSR. Retrieved from

<http://www.icpsr.umich.edu/icpsrweb/content/membership/index.html>

ICPSR (N.D.b) National Longitudinal Study of Adolescent Health (Add Health), 1994-2008

(ICPSR 21600). Retrieved from

<http://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/21600>

Kuhlberg, J. A., Pena, J. B., Zayas, L. H. (2010). Familism, parent-adolescent conflict, self-esteem, internalizing behaviors and suicide attempts among adolescent Latinas. *Child Psychiatry Human Development*, 41, 425-440. doi:10.1007/s10578-010-0179-0

Kulis, S., Marsiglia, F. F., & Nagoshi, J. L. (2010). Gender roles, externalizing behaviors, and substance use among Mexican-American adolescents. *Journal of Social Work Practice in the Addictions*, 10, 283-307. doi:10.1080/1533256X.2010.497033

Kurtzleben, D. (2010). U.S. Hispanic population is booming: Recent census data shows roughly one in four children under the age of 10 are Hispanic. *U.S. News*. Retrieved from <http://www.usnews.com/news/articles/2010/12/14/us-hispanic-population-is-booming>

Martin, D. J., Garske, J. P. & David, M. K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting Clinical Psychologist*, 68, 438-450.

McDonald, E. J., McCabe, K., Yeh, M., Lau, A., Garland, A., & Hough, R.L. (2005). Cultural affiliation and self-esteem as predictors of internalizing symptoms among Mexican American adolescents. *Journal of Clinical Child and Adolescent Psychology*, 34(1), 163-171.

McGue, M., Elkins, I., Walden, B., & Iacono, W. G. (2005). Perceptions of parent-adolescent relationships: A longitudinal investigation. *Developmental Psychology*, 41(6), 971-984. doi: 10.1037/0012-1649.41.6.971

McKinney, C. & Renk, K. (2011). A multivariate model of parent-adolescent relationship

variables in early adolescence. *Child Psychiatry and Human Development*, 42, 442-462.

doi: 10.1007/s10578-011-0228-3

Monette, D. R., Sullivan, T. J. & DeJong, C. R. (2011). *Applied social research: A tool for the human services* (8th ed.). Australia: Brooks/Cole, Cengage Learning.

Motel, S. (2012). Statistical portrait of Hispanics in the United States, 2010. *Pew Research Center: Pew Hispanic Center*. Retrieved from

<http://www.pewhispanic.org/2012/02/21/statistical-portrait-of-hispanics-in-the-united-states-2010/>

National Council of La Raza [NCLR]. (2005, White Paper). Critical disparities in Latino mental health: Transforming research into action. Institute for Hispanic Health. Retrieved from <http://www.csulb.edu/centers/latinohealth/WP-Latino%20Mental%20Health-FNL.PDF>

Nye, F. I. (1958). *Family relationships and delinquent behavior*. Westport, CT: Greenwood Press.

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385-401.

Ramirez, O. (1989). Mexican American children and adolescents. In J. T. Gibbs & L. N. Huang (Eds.), *Children of color: Psychological interventions with minority youth* (224-250). San Francisco, CA: Jossey-Bass.

Repinski, D. J. & Zook, J. M. (2005). Three measures of closeness in adolescents' relationships with parents and friends: Variations and developmental significance. *Personal Relationships*, 12, 79-102.

Schriver, J. M. (2004). *Human behavior and the social environment: Shifting paradigms in essential knowledge for social work practice* (4th ed.). Boston, MA: Pearson Education, Inc.

Smokowski, P. R., Bacallao, M., & Buchanan, R. L. (2009). Interpersonal mediators linking

acculturation stressors to subsequent internalizing symptoms and self-esteem in Latino adolescents. *Journal of Community Psychology*, 37(8), 1024-1045.

doi:10.1002/jcop.20346

Udry, J. R. (2001). The National Longitudinal Study of Adolescent Health: References, instruments, and questionnaires consulted in the development of the Add Health in-home adolescent interview. Retrieved from

www.cpc.unc.edu/projects/addhealth/data/guides/refer.pdf

Udry, J. R., Bearman, P. S., & Harris, K. M. (1994-1995). National Longitudinal Adolescent Health Survey: Wave I; North Carolina.

Voisine, S., Parsai, M., Marsiglia, F. F., Kulis, S., & Nieri, T. (2008). Effects of parental monitoring, permissiveness, and injunctive norms on substance use among Mexican and Mexican American adolescents. *Families in Society: The Journal of Contemporary Social Services*, 89(2), 264-273. doi: 10.1606/1044-3894.3742

Appendix A: Add Health & ICPSR Terms of Use

DATA SHARING FOR DEMOGRAPHIC RESEARCH

A data archive for demography and population science

Terms of Use

Please read the terms of use below. If you agree to them, click on the "I Agree" button to proceed to download your data cart. If you do not agree, you can click on the "I Do Not Agree" button to return to the home page.

The Add Health data you have requested are archived and distributed by ICPSR. In preparing these data for public release, Add Health and ICPSR performed a number of procedures to ensure that the identity of research subjects, households, schools and communities cannot be disclosed. For example, direct identifiers were omitted from datasets, and some characteristics were recoded or masked if they could be combined with others to identify individuals. Any intentional or unintentional identification or disclosure of a person, household, school, organization, or community violates the assurances of confidentiality given to the providers of the information. Therefore, users of Add Health data obtained from the ICPSR archive and/or any of its special topic archives agree:

- To use these datasets solely for research and aggregate statistical reporting and/or educational use in classrooms, and not for investigation of specific individuals, households, schools, organizations, or communities
- To avoid the release of any information that could identify individuals, households, schools, or communities, either directly or indirectly
- To avoid inadvertent disclosure of persons, families, or households by using the following guidelines in the release of statistics derived from the data files:
 1. In no table should all cases in any row or column be found in a single cell
 2. In no instance should the total for a row or column of a cross-tabulation be fewer than three (3)
 3. In no case should a cell frequency of a cross-tabulation be fewer than three (3) cases
 4. In no instance should a quantity figure be based on fewer than three (3) cases
 5. Data released should never permit disclosure when used in combination with other known data
- To make no use of the identity of any person, household, school, organization, or community discovered inadvertently; to advise ICPSR and Add Health of any such discovery within one (1) business day; and to safeguard or destroy the identifying information as requested by ICPSR and Add Health
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- To require others at your institution who use the data to read this agreement
- To include the following acknowledgement in any books, articles, conference papers, theses, dissertations, reports or other publications that employ Add Health data:

This research uses data from Add Health, a program project designed by J. Richard Udry, Peter S. Bearman, and Kathleen Mullan Harris, and funded by a grant P01-HD31921 from the Eunice Kennedy Shriver National Institute of Child Health and Human Development, with cooperative funding from 17 other agencies. Special acknowledgment is due Ronald R. Rindfuss and Barbara Entwisle for assistance in the original design. Persons interested in obtaining data files from Add Health should contact Add Health, Carolina Population Center, 123 W. Franklin Street, Chapel Hill, NC 27516-2524 (addhealth@unc.edu). No direct support was received from grant P01-HD31921 for this analysis.

ICPSR further asks that authors of publications based on ICPSR data should send copies of their published works or publication references to ICPSR for inclusion in a database of related publications.

In addition, the user acknowledges that the original collector of the data, ICPSR, and the relevant funding agency bear no responsibility for use of the data or for interpretations or inferences based upon such uses.

By continuing past this point to the data retrieval process, you signify your agreement to comply with the above-stated requirements and give your assurance that the use of statistical data obtained from ICPSR and/or its Special Topic Archives will conform to widely-accepted standards of practice and legal restrictions that are intended to protect the confidentiality of research subjects.

Appendix B: Study Variables

Codes, Operational Definitions, Responses Options, and Levels of Measurement

Pulled from the Add Health In-Home Questionnaire (Udry et al., 1994-5):

Section 10: Feelings Scale

Feelings Scale (H1FS, interval)

How often was each of the following true during the last week?

0 = never or rarely

1 = sometimes

2 = a lot of the time

3 = most of the time or all of the time

6 = refused

8 = don't know

1. You were bothered by things that usually don't bother you **H1FS1**
2. You didn't feel like eating, your appetite was poor **H1FS2**
3. You felt that you could not shake off the blues, even with help from your family and your friends **H1FS3**
4. You felt that you were just as good as other people **H1FS4**
5. You had trouble keeping your mind on what you were doing **H1FS5**
6. You felt depressed **H1FS6**
7. You felt that you were too tired to do things **H1FS7**
8. You felt hopeful about the future **H1FS8**
9. You thought your life had been a failure **H1FS9**
10. You felt fearful **H1FS10**
11. You were happy **H1FS11**
12. You talked less than usual **H1FS12**
13. You felt lonely **H1FS13**
14. People were unfriendly to you **H1FS14**
15. You enjoyed life **H1FS15**
16. You felt sad **H1FS16**
17. You felt that people disliked you **H1FS17**
18. It was hard to get started doing things **H1FS18**
19. You felt life was not worth living **H1FS19**

Section 16: Relations with Parents

Parental Monitoring Scale (researcher-created scale, H1WP1-7, interval)

1. Do your parents let you make your own decisions about the time you must be home on weekend nights? Y/N **H1WP1**
2. Do your parents let you make your own decisions about the people you hang around with? Y/N **H1WP2**
3. Do your parents let you make your own decisions about what you wear? Y/N **H1WP3**
4. Do your parents let you make your own decisions about how much television you watch? Y/N **H1WP4**
5. Do your parents let you make your own decisions about which television programs you watch? Y/N **H1WP5**
6. Do your parents let you make your own decisions about what time you go to bed on weeknights? Y/N **H1WP6**
7. Do your parents let you make your own decisions about what you eat? Y/N **H1WP7**
8. **H1WP8** omitted

9. How close do you feel to your mother/adoptive mother/stepmother/foster mother?
(H1WP9, ordinal)
 1. Not at all
 2. Very little
 3. Somewhat
 4. Quite a bit
 5. Very much
 6. Refused
 7. Legitimate skip (no mom)
 8. Don't know
10. How much do you think she cares about you? **(H1WP10, ordinal)**
 1. Not at all
 2. Very little
 3. Somewhat
 4. Quite a bit
 5. Very much
 6. Refused
 7. Legitimate skip (no mom)
 8. Don't know
11. On a scale of 1 to 5, where 1 is low and 5 is high, how disappointed would she be if you did not graduate from college? **(H1WP10, ordinal)**
12. On a scale of 1 to 5, where 1 is low and 5 is high, how disappointed would she be if you did not graduate from high school? **(H1WP11, ordinal)**
13. How close do you feel to your father/adoptive father/stepfather/foster father? **(H1WP13, ordinal)**
 1. Not at all
 2. Very little
 3. Somewhat
 4. Quite a bit
 5. Very much
 6. Refused
 7. Legitimate skip (no dad)
 8. Don't know
14. How much do you think he cares about you? **(H1WP14, ordinal)**
 1. Not at all
 2. Very little
 3. Somewhat
 4. Quite a bit
 5. Very much
 6. Refused
 7. Legitimate skip (no mom)
 8. Don't know
15. On a scale of 1 to 5, where 1 is low and 5 is high, how disappointed would he be if you did not graduate from college? **(H1WP15, ordinal)**
16. On a scale of 1 to 5, where 1 is low and 5 is high, how disappointed would he be if you did not graduate from high school? **(H1WP16, ordinal)**
17. Which of the things listed on this card have you done with your mother/adoptive mother/stepmother/foster mother in the past 4 weeks? **(Researcher-created scale, H1WP17, interval)**
 - a. Gone shopping Y/N **(H1WP17A, nominal)**

- b. Played a sport Y/N **(H1WP17B, nominal)**
 - c. Gone to a religious service or church-related event Y/N **(H1WP17C, nominal)**
 - d. Talked about someone you're dating, or a party you went to Y/N **(H1WP17D, nominal)**
 - e. Gone to a movie, play, museum, concert, or sports event Y/N **(H1WP17E, nominal)**
 - f. Had a talk about a personal problem you were having Y/N **(H1WP17F, nominal)**
 - g. Had a serious argument about your behavior Y/N **(H1WP17G, nominal)**
 - h. Talked about your school work or grades Y/N **(H1WP17H, nominal)**
 - i. Worked on a project for school Y/N **(H1WP17I, nominal)**
 - j. Talked about other things you're doing in school Y/N **(H1WP17J, nominal)**
 - k. None **(H1WP17K, nominal)**
18. Which of the things listed on this card have you done with your father/adoptive father/stepfather/foster father in the past 4 weeks? **(Researcher-created scale, H1WP18, interval)**
- a. Gone shopping Y/N **(H1WP18A, nominal)**
 - b. Played a sport Y/N **(H1WP18B, nominal)**
 - c. Gone to a religious service or church-related event Y/N **(H1WP18C, nominal)**
 - d. Talked about someone you're dating, or a party you went to Y/N **(H1WP18D, nominal)**
 - e. Gone to a movie, play, museum, concert, or sports event Y/N **(H1WP18E, nominal)**
 - f. Had a talk about a personal problem you were having Y/N **(H1WP18F, nominal)**
 - g. Had a serious argument about your behavior Y/N **(H1WP18G, nominal)**
 - h. Talked about your school work or grades Y/N **(H1WP18H, nominal)**
 - i. Worked on a project for school Y/N **(H1WP18I, nominal)**
 - j. Talked about other things you're doing in school Y/N **(H1WP18J, nominal)**
 - k. None **(H1WP18K, nominal)**

Section 18: Personality and Family

- 1. Most of the time, your mother is warm and loving towards you **(H1PF1, ordinal)**
 - 1. Strongly agree
 - 2. Agree
 - 3. Neither agree nor disagree
 - 4. Disagree
 - 5. Strongly disagree
 - 6. Refused
 - 7. Legitimate skip
 - 8. Don't know
- 2. Your mother encourages you to be independent **(H1PF2, ordinal)**
 - a. Strongly agree
 - b. Agree
 - c. Neither agree nor disagree
 - d. Disagree
 - e. Strongly disagree
 - f. Refused
 - g. Legitimate skip
 - h. Don't know

3. When you do something wrong that is important, your mother talks about it with you and helps you understand why it is wrong **(H1PF3, ordinal)**
 1. Strongly agree
 2. Agree
 3. Neither agree nor disagree
 4. Disagree
 5. Strongly disagree
 6. Refused
 7. Legitimate skip
 8. Don't know
4. You are satisfied with the way your mother and you communicate with each other **(H1PF4, ordinal)**
 1. Strongly agree
 2. Agree
 3. Neither agree nor disagree
 4. Disagree
 5. Strongly disagree
 6. Refused
 7. Legitimate skip
 8. Don't know

[H1PF5 – H1PF22] omitted

23. Most of the time, your father is warm and loving towards you **(H1PF23, ordinal)**
 1. Strongly agree
 2. Agree
 3. Neither agree nor disagree
 4. Disagree
 5. Strongly disagree
 6. Refused
 7. Legitimate skip
 8. Don't know
24. You are satisfied with the way your father and you communicate with each other **(H1PF24, ordinal)**
 1. Strongly agree
 2. Agree
 3. Neither agree nor disagree
 4. Disagree
 5. Strongly disagree
 6. Refused
 7. Legitimate skip
 8. Don't know
25. **H1PF25** omitted

Self-Esteem/Mental Health Scale (researcher-created scale, H1PF26-36, interval)

- 1 = Strongly agree
- 2 = Agree
- 3 = Neither agree nor disagree
- 4 = Disagree
- 5 = Strongly disagree

6 = Refused

7 = Legitimate skip

8 = Don't know

26. You have a lot of energy. **(H1PF26)**
27. You seldom get sick. **(H1PF27)**
28. When you do get sick, you get better quickly. **(H1PF28)**
29. You are well coordinated. **(H1PF29)**
30. You have a lot of good qualities. **(H1PF30)**
31. You are physically fit. **(H1PF31)**
32. You have a lot to be proud of. **(H1PF32)**
33. You like yourself just the way you are. **(H1PF33)**
34. You feel like you are doing everything just about right. **(H1PF34)**
35. You feel socially accepted. **(H1PF35)**
36. You feel loved and wanted. **(H1PF36)**

Section 35: Protective Factors

1 = Not at all

2 = Very little

3 = Somewhat

4 = Quite a bit

5 = Very much

6 = Does not apply

96 = Refused

98 = Don't know

3. How much do you feel that your parents care about you? **(H1PR3, ordinal)**
4. **H1PR4** omitted
5. How much do you feel that people in your family understand you? **(H1PR5, ordinal)**
6. **H1PR6** omitted
7. How much do you feel that you and your family have fun together? **(H1PR7, ordinal)**
8. How much do you feel that your family pays attention to you? **(H1PR8, ordinal)**

Appendix C: Outline of Statistical Analysis Plan

Broad Outline of Statistical Tests

- I. Relationship Between Closeness and Care**
- II. Closeness/Care and Emotional Health**
 - a. Closeness and Emotional Health*
 - i. Resident Mothers
 - ii. Resident Fathers
 - b. Care and Emotional Health (available for resident parents only)*
 - i. Resident Mothers
 - ii. Resident Fathers
 - iii. Resident Parents
- III. Resident Mothers**
 - a. Features of Closeness*
 - b. Features of Care*
- IV. Resident Fathers**
 - a. Features of Closeness*
 - b. Features of Care*
- V. Features of Parental Care**
- VI. Features of Closeness/Care and Emotional Health**
 - a. Time Spent Together*
 - b. Communication*
 - c. Goals/Academics*
 - d. Warmth/Encouragement*

Specific Outline of Statistical Tests

RELATIONSHIP BETWEEN CLOSENESS AND CARE

Question:

What is the relationship between perceived level of care and perceived level of closeness in maternal-adolescent son relationships?

Variables:

Perceived mother-adolescent closeness (H1WP9, ordinal) + Perceived maternal care (H1WP10, ordinal)

Statistics:

Chi-square

Question:

What is the relationship between perceived level of care and perceived level of closeness in paternal-adolescent son relationships?

Variables:

Perceived father-adolescent closeness (H1WP13, ordinal) + Perceived paternal care (H1WP14, ordinal)

Statistics:

Chi-square

LEVELS OF CLOSENESS/CARE AND ADOLESCENT EMOTIONAL HEALTH

Question: What is the relationship between perceived level of parent-adolescent closeness and adolescent emotional health?

Variables:

- Feelings scale (H1FS, interval) + Perceived mother-adolescent closeness (H1WP9, ordinal)
- Feelings scale (H1FS, interval) + Perceived father-adolescent closeness (H1WP13, ordinal)
- Self-esteem/mental health scale (H1PF26-36, interval) + Perceived mother-adolescent closeness (H1WP9, ordinal)
- Self-esteem/mental health scale (H1PF26-36, interval) + Perceived father-adolescent closeness (H1WP13, ordinal)

Statistics:

All 4 variable pairs above will be measured for statistical difference using t-tests.

Question: What is the relationship between perceived level of parent-adolescent care and adolescent emotional health?

Variables:

- Feelings scale (H1FS, interval) + Perceived maternal care (H1WP10, ordinal)
- Feelings scale (H1FS, interval) + Perceived paternal care (H1WP14, ordinal)
- Feelings scale (H1FS, interval) + Perceived parental care (H1PR3, ordinal)
- Self-esteem/mental health scale (H1PF26-36, interval) + Perceived maternal care (H1WP10, ordinal)
- Self-esteem/mental health scale (H1PF26-36, interval) + Perceived paternal care (H1WP14, ordinal)
- Self-esteem/mental health scale (H1PF26-36, interval) + Perceived parental care (H1PR3, ordinal)

Statistics:

All 6 variable pairs above will be measured for statistical difference using t-tests.

FEATURES OF CLOSENESS AND CARE

Question: Which factors contribute to perceived levels of maternal-adolescent closeness?

Variables and Statistical Tests:

Time spent together:

Closeness to resident mother (H1WP9, ordinal)

- + Activities done in tandem in last month (Researcher created scale, H1WP17, interval) = T-Test
- + Gone shopping together (H1WP17A, nominal) = Chi-square
- + Played a sport together (H1WP17B, nominal) = Chi-square
- + Attended a religious service/church event together (H1WP17C, nominal) = Chi-square
- + Gone to a movie/play/museum/concert/sports event together (H1WP17E, nominal) = Chi-square

Communication:

Closeness to resident mother (H1WP9, ordinal)

- + Satisfaction with mother-adolescent communication (H1PF4, ordinal) = Chi-square
- + Talked about adolescent's social life (someone he/she is dating or a party he/she attended)

(H1WP17D, nominal) = Chi-square

+ Talked about adolescent's personal problem (H1WP17F, nominal) = Chi-square

+ Had a serious argument (H1WP17G, nominal) = Chi-square

Goals and academics:

Closeness to resident mother (H1WP9, ordinal)

+ Perception of how disappointed resident mother would be if adolescent did not graduate from college (H1WP11, ordinal) = Chi-square

+ Perception of how disappointed resident mother would be if adolescent did not graduate from high school (H1WP12, ordinal) = Chi-square

+ Talked about school work/grades (H1WP17H, nominal) = Chi-square

+ Worked on a school project together (H1WP17I, nominal) = Chi-square

+ Talked about other things adolescent is doing in school (H1WP17J, nominal) = Chi-square

Warmth and emotional support:

Closeness to resident mother (H1WP9, ordinal)

+ Mother is warm and loving (H1PF1, ordinal) = Chi-square

+ Mother encourages independence (H1PF2, ordinal) = Chi-square

+ When you do something wrong, mother talks to you about it and helps you understand why it is wrong (H1PF3, ordinal) = Chi-square

Question: Which factors contribute to perceived levels of maternal care?

Variables and Statistical Tests:

Time spent together:

Maternal level of care (H1WP10, ordinal)

+ Activities done in tandem in last month (Researcher created scale, H1WP17, interval) = T-Test

+ Gone shopping together (H1WP17A, nominal) = Chi-square

+ Played a sport together (H1WP17B, nominal) = Chi-square

+ Attended a religious service/church event together (H1WP17C, nominal) = Chi-square

+ Gone to a movie/play/museum/concert/sports event together (H1WP17E, nominal) = Chi-square

Communication:

Maternal level of care (H1WP10, ordinal)

+ Satisfaction with mother-adolescent communication (H1PF4, ordinal) = Chi-square

+ Talked about adolescent's social life (someone he/she is dating or a party he/she attended) (H1WP17D, nominal) = Chi-square

+ Talked about adolescent's personal problem (H1WP17F, nominal) = Chi-square

+ Had a serious argument (H1WP17G, nominal) = Chi-square

Goals and academics:

Maternal level of care (H1WP10, ordinal)

+ Perception of how disappointed resident mother would be if adolescent did not graduate from college (H1WP11, ordinal) = Chi-square

+ Perception of how disappointed resident mother would be if adolescent did not graduate from high school (H1WP12, ordinal) = Chi-square

+ Talked about school work/grades (H1WP17H, nominal) = Chi-square

+ Worked on a school project together (H1WP17I, nominal) = Chi-square

- + Talked about other things adolescent is doing in school (H1WP17J, nominal) = Chi-square

Warmth and emotional support:

Maternal level of care (H1WP10, ordinal)

- + Mother is warm and loving (H1PF1, ordinal) = Chi-square
- + Mother encourages independence (H1PF2, ordinal) = Chi-square
- + When you do something wrong, mother talks to you about it and helps you understand why it is wrong (H1PF3, ordinal) = Chi-square

Question: Which factors contribute to perceived levels of paternal-adolescent closeness?

Variables and Statistical Tests:

Time spent together:

Closeness to resident father (H1WP13, ordinal)

- + Activities done in tandem in last month (Researcher created scale, H1WP18, interval) = T-Test
- + Gone shopping together (H1WP18A, nominal) = Chi-square
- + Played a sport together (H1WP18B, nominal) = Chi-square
- + Attended a religious service/church event together (H1WP18C, nominal) = Chi-square
- + Gone to a movie/play/museum/concert/sports event together (H1WP18E, nominal) = Chi-square

Communication:

Closeness to resident father (H1WP13, ordinal)

- + Satisfaction with father-adolescent communication (H1PF24, ordinal) = Chi-square
- + Talked about adolescent's social life (someone he/she is dating or a party he/she attended) (H1WP18D, nominal) = Chi-square
- + Talked about adolescent's personal problem (H1WP18F, nominal) = Chi-square
- + Had a serious argument (H1WP18G, nominal) = Chi-square

Goals and academics:

Closeness to resident father (H1WP13, ordinal)

- + Perception of how disappointed resident father would be if adolescent did not graduate from college (H1WP15, ordinal) = Chi-square
- + Perception of how disappointed resident father would be if adolescent did not graduate from high school (H1WP16, ordinal) = Chi-square
- + Talked about school work/grades (H1WP18H, nominal) = Chi-square
- + Worked on a school project together (H1WP18I, nominal) = Chi-square
- + Talked about other things adolescent is doing in school (H1WP18J, nominal) = Chi-square

Warmth and emotional support:

Closeness to resident father (H1WP13, ordinal)

- + Father is warm and loving (H1PF23, ordinal) = Chi-square

Question: Which factors contribute to perceived levels of paternal care?

Variables and Statistical Tests:

Time spent together:

Paternal level of care (H1WP14, ordinal)

- + Activities done in tandem in last month (Researcher created scale, H1WP18, interval) = T-Test
- + Gone shopping together (H1WP18A, nominal) = Chi-square
- + Played a sport together (H1WP18B, nominal) = Chi-square
- + Attended a religious service/church event together (H1WP18C, nominal) = Chi-square
- + Gone to a movie/play/museum/concert/sports event together (H1WP18E, nominal) = Chi-square

Communication:

Paternal level of care (H1WP14, ordinal)

- + Satisfaction with father-adolescent communication (H1PF24, ordinal) = Chi-square
- + Talked about adolescent's social life (someone he/she is dating or a party he/she attended) (H1WP18D, nominal) = Chi-square
- + Talked about adolescent's personal problem (H1WP18F, nominal) = Chi-square
- + Had a serious argument (H1WP18G, nominal) = Chi-square

Goals and academics:

Paternal level of care (H1WP14, ordinal)

- + Perception of how disappointed resident father would be if adolescent did not graduate from college (H1WP15, ordinal) = Chi-square
- + Perception of how disappointed resident father would be if adolescent did not graduate from high school (H1WP16, ordinal) = Chi-square
- + Talked about school work/grades (H1WP18H, nominal) = Chi-square
- + Worked on a school project together (H1WP18I, nominal) = Chi-square
- + Talked about other things adolescent is doing in school (H1WP18J, nominal) = Chi-square

Warmth and emotional support:

Paternal level of care (H1WP14, ordinal)

- + Father is warm and loving (H1PF23, ordinal) = Chi-square

Question: Which factors contribute to perceived levels of parental care?

Variables and Statistical Tests:

- Parental care (H1PR3, ordinal) + Family understands you (H1PR5, ordinal) = Chi-square
- Parental care (H1PR3, ordinal) + Have fun with family (H1PR7, ordinal) = Chi-square
- Parental care (H1PR3, ordinal) + Family pays attention to you (H1PR8, ordinal) = Chi-square

FEATURES OF CLOSENESS/CARE AND EMOTIONAL HEALTH

Question: What is the relationship between features of maternal closeness/care and adolescent emotional health outcomes?

Variables and Statistical Tests:

Time spent together:

Feelings scale (H1FS, interval);

Self-esteem/mental health scale (H1PF26-36, interval)

- + Activities done in tandem in last month (Researcher created scale, H1WP17, interval) = T-Test
- + Gone shopping together (H1WP17A, nominal) = Chi-square
- + Played a sport together (H1WP17B, nominal) = Chi-square

- + Attended a religious service/church event together (H1WP17C, nominal) = Chi-square
- + Gone to a movie/play/museum/concert/sports event together (H1WP17E, nominal) = Chi-square

Communication:

Feelings scale (H1FS, interval);

Self-esteem/mental health scale (H1PF26-36, interval)

- + Satisfaction with mother-adolescent communication (H1PF4, ordinal) = Chi-square
- + Talked about adolescent's social life (someone he/she is dating or a party he/she attended) (H1WP17D, nominal) = Chi-square
- + Talked about adolescent's personal problem (H1WP17F, nominal) = Chi-square
- + Had a serious argument (H1WP17G, nominal) = Chi-square

Goals and academics:

Feelings scale (H1FS, interval);

Self-esteem/mental health scale (H1PF26-36, interval)

- + Perception of how disappointed resident mother would be if adolescent did not graduate from college (H1WP11, ordinal) = Chi-square
- + Perception of how disappointed resident mother would be if adolescent did not graduate from high school (H1WP12, ordinal) = Chi-square
- + Talked about school work/grades (H1WP17H, nominal) = Chi-square
- + Worked on a school project together (H1WP17I, nominal) = Chi-square
- + Talked about other things adolescent is doing in school (H1WP17J, nominal) = Chi-square

Warmth and emotional support:

Feelings scale (H1FS, interval);

Self-esteem/mental health scale (H1PF26-36, interval)

- + Mother is warm and loving (H1PF1, ordinal) = Chi-square
- + Mother encourages independence (H1PF2, ordinal) = Chi-square
- + When you do something wrong, mother talks to you about it and helps you understand why it is wrong (H1PF3, ordinal) = Chi-square

Question: What is the relationship between features of paternal closeness/care and adolescent emotional health outcomes?

Variables and Statistical Tests:

Time spent together:

Feelings scale (H1FS, interval);

Self-esteem/mental health scale (H1PF26-36, interval)

- + Activities done in tandem in last month (Researcher created scale, H1WP18, interval) = T-Test
- + Gone shopping together (H1WP18A, nominal) = Chi-square
- + Played a sport together (H1WP18B, nominal) = Chi-square
- + Attended a religious service/church event together (H1WP18C, nominal) = Chi-square
- + Gone to a movie/play/museum/concert/sports event together (H1WP18E, nominal) = Chi-square

Communication:

Feelings scale (H1FS, interval);

Self-esteem/mental health scale (H1PF26-36, interval)

- + Satisfaction with father-adolescent communication (H1PF24, ordinal) = Chi-square
- + Talked about adolescent's social life (someone he/she is dating or a party he/she attended) (H1WP18D, nominal) = Chi-square
- + Talked about adolescent's personal problem (H1WP18F, nominal) = Chi-square
- + Had a serious argument (H1WP18G, nominal) = Chi-square

Goals and academics:

Feelings scale (H1FS, interval);

Self-esteem/mental health scale (H1PF26-36, interval)

- + Perception of how disappointed resident father would be if adolescent did not graduate from college (H1WP15, ordinal) = Chi-square
- + Perception of how disappointed resident father would be if adolescent did not graduate from high school (H1WP16, ordinal) = Chi-square
- + Talked about school work/grades (H1WP18H, nominal) = Chi-square
- + Worked on a school project together (H1WP18I, nominal) = Chi-square
- + Talked about other things adolescent is doing in school (H1WP18J, nominal) = Chi-square

Warmth and emotional support:

Feelings scale (H1FS, interval);

Self-esteem/mental health scale (H1PF26-36, interval)

- + Father is warm and loving (H1PF23, ordinal) = Chi-square

Question: What is the relationship between features of parental closeness/care and adolescent emotional health outcomes?

Variables and Statistical Tests:

Feelings scale (H1FS, interval);

Self-esteem/mental health scale (H1PF26-36, interval)

- + Family understands you (H1PR5, ordinal) = Chi-square
- + Have fun with family (H1PR7, ordinal) = Chi-square
- + Family pays attention to you (H1PR8, ordinal) = Chi-square

Appendix D: Recoded Variables

MOTHER VARIABLES

Mother-Adolescent Closeness

Original Codes: 1 = Not at all; 2 = Very little; 3 = Somewhat; 4 = Quite a bit; 5 = Very much

Recoding: 1, 2, 3 → 1; 4, 5 → 2

New Codes: 1 = Low to Moderate Closeness; 2 = Moderate to High Closeness

Statistics:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	14	6.9	7.5	7.5
	2.00	172	84.7	92.5	100.0
	Total	186	91.6	100.0	
Missing	System	17	8.4		
Total		203	100.0		

Maternal Care

Original Codes: 1 = Not at all; 2 = Very little; 3 = Somewhat; 4 = Quite a bit; 5 = Very much

Recoding: 1, 2, 3 → 1; 4, 5 → 2

New Codes: 1 = Low to Moderate Care; 2 = Moderate to High Care

Statistics:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	4	2.0	2.2	2.2
	2.00	182	89.7	97.8	100.0
	Total	186	91.6	100.0	
Missing	System	17	8.4		
Total		203	100.0		

Mother Is Warm & Loving

Original Codes: 1 = Strongly agree; 2 = Agree; 3 = Neither agree nor disagree; 4 = Disagree; 5 = Strongly disagree

Recoding: 1, 2 → 1; 3, 4, 5 → 2

New Codes: 1 = Agree; 2 = Neutral or Disagree

Statistics:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	167	82.3	89.8	89.8
	2.00	19	9.4	10.2	100.0
	Total	186	91.6	100.0	
Missing	System	17	8.4		
Total		203	100.0		

Mother Encourages Independence

Original Codes: 1 = Strongly agree; 2 = Agree; 3 = Neither agree nor disagree; 4 = Disagree; 5 = Strongly disagree

Recoding: 1, 2 → 1; 3, 4, 5 → 2

New Codes: 1 = Agree; 2 = Neutral or Disagree

Statistics:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	150	73.9	81.1	81.1
	2.00	35	17.2	18.9	100.0
	Total	185	91.1	100.0	
Missing	System	18	8.9		
Total		203	100.0		

Mother Discusses Right & Wrong

Original Codes: 1 = Strongly agree; 2 = Agree; 3 = Neither agree nor disagree; 4 = Disagree; 5 = Strongly disagree

Recoding: 1, 2 → 1; 3, 4, 5 → 2

New Codes: 1 = Agree; 2 = Neutral or Disagree

Statistics:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	153	75.4	83.2	83.2
	2.00	31	15.3	16.8	100.0
	Total	184	90.6	100.0	
Missing	System	19	9.4		
Total		203	100.0		

Satisfaction with Mother-Adolescent Communication

Original Codes: 1 = Strongly agree; 2 = Agree; 3 = Neither agree nor disagree; 4 = Disagree; 5 = Strongly disagree

Recoding: 1, 2 → 1; 3, 4, 5 → 2

New Codes: 1 = Agree; 2 = Neutral or Disagree

Statistics:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	160	78.8	86.5	86.5
	2.00	25	12.3	13.5	100.0
	Total	185	91.1	100.0	
Missing	System	18	8.9		
Total		203	100.0		

Mother's Disappointment If Adolescent Is Not College Grad

Original Codes: 1 (Low) to 5 (High)

Recoding: 1, 2, 3 → 1; 4, 5 → 2

New Codes: 1 = Low to Moderate Disappointment; 2 = Moderate to High Disappointment

Statistics:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	75	36.9	40.5	40.5
	2.00	110	54.2	59.5	100.0

Total	185	91.1	100.0
Missing System	18	8.9	
Total	203	100.0	

Mother's Disappointment If Adolescent Is Not HS Grad

Original Codes: 1 (Low) to 5 (High)

Recoding: 1, 2, 3 → 1; 4, 5 → 2

New Codes: 1 = Low to Moderate Disappointment; 2 = Moderate to High Disappointment

Statistics:

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	22	10.8	11.8	11.8
2.00	164	80.8	88.2	100.0
Total	186	91.6	100.0	
Missing System	17	8.4		
Total	203	100.0		

Shared Activities With Mother

Original Codes: 0 (No shared activities) to 10 (Most shared activities)

Recoding: 0-5.5 → 1; 5.5-10 → 2

New Codes: 1 = Fewer shared activities; 2 = More shared activities

Statistics:

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	152	74.9	82.2	82.2
2.00	33	16.3	17.8	100.0
Total	185	91.1	100.0	
Missing System	18	8.9		
Total	203	100.0		

FATHER VARIABLES

Father-Adolescent Closeness

Original Codes: 1 = Not at all; 2 = Very little; 3 = Somewhat; 4 = Quite a bit; 5 = Very much

Recoding: 1, 2, 3 → 1; 4, 5 → 2

New Codes: 1 = Low to Moderate Closeness; 2 = Moderate to High Closeness

Statistics:

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	24	11.8	15.8	15.8
2.00	128	63.1	84.2	100.0
Total	152	74.9	100.0	
Missing System	51	25.1		

Statistics:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	24	11.8	15.8	15.8
	2.00	128	63.1	84.2	100.0
	Total	152	74.9	100.0	
Missing	System	51	25.1		
Total		203	100.0		

Paternal Care

Original Codes: 1 = Not at all; 2 = Very little; 3 = Somewhat; 4 = Quite a bit; 5 = Very much

Recoding: 1, 2, 3 → 1; 4, 5 → 2

New Codes: 1 = Low to Moderate Care; 2 = Moderate to High Care

Statistics:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	6	3.0	3.9	3.9
	2.00	146	71.9	96.1	100.0
	Total	152	74.9	100.0	
Missing	System	51	25.1		
Total		203	100.0		

Father Is Warm & Loving

Original Codes: 1 = Strongly agree; 2 = Agree; 3 = Neither agree nor disagree; 4 = Disagree; 5 = Strongly disagree

Recoding: 1, 2 → 1; 3, 4, 5 → 2

New Codes: 1 = Agree; 2 = Neutral or Disagree

Statistics:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	117	57.6	77.0	77.0
	2.00	35	17.2	23.0	100.0
	Total	152	74.9	100.0	
Missing	System	51	25.1		
Total		203	100.0		

Satisfaction with Father-Adolescent Communication

Original Codes: 1 = Strongly agree; 2 = Agree; 3 = Neither agree nor disagree; 4 = Disagree; 5 = Strongly disagree

Recoding: 1, 2 → 1; 3, 4, 5 → 2

New Codes: 1 = Agree; 2 = Neutral or Disagree

Statistics:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	113	55.7	74.3	74.3
	2.00	39	19.2	25.7	100.0

Total	152	74.9	100.0
Missing System	51	25.1	
Total	203	100.0	

Father's Disappointment If Adolescent Is Not College Grad

Original Codes: 1 (Low) to 5 (High)

Recoding: 1, 2, 3 → 1; 4, 5 → 2

New Codes: 1 = Low to Moderate Disappointment; 2 = Moderate to High Disappointment

Statistics:

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	53	26.1	34.9	34.9
2.00	99	48.8	65.1	100.0
Total	152	74.9	100.0	
Missing System	51	25.1		
Total	203	100.0		

Father's Disappointment If Adolescent Is Not HS Grad

Original Codes: 1 (Low) to 5 (High)

Recoding: 1, 2, 3 → 1; 4, 5 → 2

New Codes: 1 = Low to Moderate Disappointment; 2 = Moderate to High Disappointment

Statistics:

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	23	11.3	15.1	15.1
2.00	129	63.5	84.9	100.0
Total	152	74.9	100.0	
Missing System	51	25.1		
Total	203	100.0		

Shared Activities With Father

Original Codes: 0 (No shared activities) to 10 (Most shared activities)

Recoding: 0-5.5 → 1; 5.5-10 → 2

New Codes: 1 = Fewer shared activities; 2 = More shared activities

Statistics:

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	132	65.0	86.8	86.8
2.00	20	9.9	13.2	100.0
Total	152	74.9	100.0	
Missing System	51	25.1		
Total	203	100.0		

PARENT VARIABLES

Parental Care

Original Codes: 1 = Not at all; 2 = Very little; 3 = Somewhat; 4 = Quite a bit; 5 = Very much

Recoding: 1, 2, 3 → 1; 4, 5 → 2

New Codes: 1 = Low to Moderate Care; 2 = Moderate to High Care

Statistics:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	9	4.4	4.5	4.5
	2.00	191	94.1	95.5	100.0
	Total	200	98.5	100.0	
Missing	System	3	1.5		
Total		203	100.0		

Parents Understand Me

Original Codes: 1 = Not at all; 2 = Very little; 3 = Somewhat; 4 = Quite a bit; 5 = Very much

Recoding: 1, 2, 3 → 1; 4, 5 → 2

New Codes: 1 = Low to Moderate Understanding; 2 = Moderate to High Understanding

Statistics:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	70	34.5	35.2	35.2
	2.00	129	63.5	64.8	100.0
	Total	199	98.0	100.0	
Missing	System	4	2.0		
Total		203	100.0		

Family Has Fun Together

Original Codes: 1 = Not at all; 2 = Very little; 3 = Somewhat; 4 = Quite a bit; 5 = Very much

Recoding: 1, 2, 3 → 1; 4, 5 → 2

New Codes: 1 = Low to Moderate Fun; 2 = Moderate to High Fun

Statistics:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	69	34.0	34.5	34.5
	2.00	131	64.5	65.5	100.0
	Total	200	98.5	100.0	
Missing	System	3	1.5		
Total		203	100.0		

Family Pays Attention To Me

Original Codes: 1 = Not at all; 2 = Very little; 3 = Somewhat; 4 = Quite a bit; 5 = Very much

Recoding: 1, 2, 3 → 1; 4, 5 → 2

New Codes: 1 = Low to Moderate Attention; 2 = Moderate to High Attention

Statistics:

		Frequency	Percent	Valid Percent	Cumulative Percent

Valid	1.00	48	23.6	24.0	24.0
	2.00	152	74.9	76.0	100.0
	Total	200	98.5	100.0	
Missing	System	3	1.5		
Total		203	100.0		

SCALES

Feelings Scale

Number of Variables: 19

Original Codes: 0 = Never/rarely; 1 = Sometimes; 2 = A lot of the time; 3 = Most/all of the time

Range: 0 – 57

0 = Most positive feelings

57 = Most negative feelings

Reverse scoring: 4 variables (4, 8, 11, and 15)

Recoding: 0 – 28 → 1, 29 – 57 → 2

New Codes: 1 = More positive feelings, 2 = More negative feelings

Statistics:

N	Valid	203
	Missing	0
Mean		1.1330
Median		1.0000
Mode		1.00
Std. Deviation		.34042
Range		1.00
Minimum		1.00
Maximum		2.00

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Positive Feelings	176	86.7	86.7	86.7
Negative Feelings	27	13.3	13.3	100.0
Total	203	100.0	100.0	

Self-Esteem & Mental Health Scale

Number of Variables: 11

Original Codes: 1 = Strongly agree; 2 = Agree; 3 = Neither agree or disagree; 4 = Disagree; 5 = Strongly disagree

Range: 11 – 55

11 = Highest self-esteem/positive mental health

55 = Lowest self-esteem/negative mental health

Recoding: 11 – 32 → 1, 33 – 55 → 2

New Codes: 1 = Higher self-esteem/better mental health, 2 = Lower self-esteem/poorer mental health

Statistics

N	Valid	199
	Missing	4
Mean		1.0302
Median		1.0000
Mode		1.00
Std. Deviation		.17143
Range		1.00
Minimum		1.00
Maximum		2.00

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Higher SE; Better MH	193	95.1	97.0	97.0
	Lower SE; Poorer MH	6	3.0	3.0	100.0
	Total	199	98.0	100.0	
Missing	System	4	2.0		
Total		203	100.0		

Parental Monitoring Scale

Number of Variables: 7

Original Codes: 0 (Parents do not allow adolescent to make own decisions) to 7 (Parents allow adolescent to make all of own decisions)

Recoding: 0-3.5 → 1; 3.5-7 → 2

New Codes: 1 = More monitoring; 2 = Less monitoring

Statistics:

N	Valid	196
	Missing	7
Mean		1.8010
Median		2.0000
Mode		2.00
Std. Deviation		.40026
Range		1.00
Minimum		1.00
Maximum		2.00

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	39	19.2	19.9	19.9
	2.00	157	77.3	80.1	100.0
	Total	196	96.6	100.0	
Missing	System	7	3.4		
Total		203	100.0		