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# POSTDIVORCE PARENTAL RELATIONSHIPS AND WELL-BEING AMONG AFRICAN AMERICAN, HISPANIC, AND CAUCASIAN COLLEGE STUDENTS

Ву

Janet M. Kinney

### A DISSERTATION

Submitted to
Michigan State University
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### **ABSTRACT**

POSTDIVORCE PARENTAL RELATIONSHIPS AND WELL-BEING AMONG AFRICAN AMERICAN, HISPANIC, AND CAUCASIAN COLLEGE STUDENTS

By

### Janet M. Kinney

Adolescents' relationships with parents have long been acknowledged as important contributors to psychosocial development. The purpose of this study was to examine parental attachment and interparental conflict in an effort to explain why some adolescents fare well after the divorce of their parents while others do not. Of particular interest were the separate and unique contributions of attachment style (e.g., secure, insecure) with mother (M/Att) and maternal initiated conflict with father (M/CON) to attachment style with father (P/Att) and adolescent well-being (WB). Attachment to parents was examined by comparing M/Att and P/Att with regard to three domains: affective quality of relationships, facilitator of independence, and source of support. Participants were 58 African American (AA), 28 Hispanic (H), and 93 Caucasian (C) 18-23 year old young adults from a Midwestern university who came from divorced families in which mothers were the custodial parent. Across the racial/ethnic groups, participants viewed their relationships with mother and father as both independent and interdependent. Path analysis of the two groups indicated a statistically significant relationship between the entire model and the outcome variable. The

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proposed model accounted for a greater portion of variance in WB within the AA/H group (R<sup>2</sup> = .79) than within the C group (R<sup>2</sup> = .35). The findings supported the hypotheses that 1) secure M/Att and low levels of M/CON correspond with secure P/Att, 2) secure M/Att and P/Att resulted in higher levels of general, spiritual, and psychological WB, and 3) H and AA participants demonstrate more adaptive strategies to M/CON than C participants. Significant differences between the groups are illustrated and discussed. The findings suggest that it is important to evaluate the relationship between parental attachment within the context of family process variables that may explain the parental divorce-child psychosocial adjustment relationship.

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### **Dedication**

This dissertation is dedicated to the Lord my God, my family and my friends, without which my dream could never have come true. Thank you for believing in me and supporting me in your own unique way. I especially recognize and appreciate my husband, Jack, and my daughters, Samantha and Sarah. I love you very much and recognize the sacrifices you have made as I have completed this journey.

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# Postdivorce Parental Relationships and Well-being among African American, Hispanic, and Caucasian College Students

### Introduction

Adolescents are highly valued in our society and therefore, there is concern for their adjustment and well-being. Parental attachment and conflict merit attention in the context of adolescents' well-being post-divorce and therefore, will be the foci of this investigation. The number of adolescents with divorced parents has continued to grow over the last several decades and since 1972, one million American children every year have seen their parents divorce (U.S. Bureau of the Census, 2005). Some adolescents display negative behavioral and/or psychosocial effects (e.g., decrease in school performance, delinquency, depression, and difficulties with interpersonal relationships) that can be attributed to the divorce of their parents, while others do not. The factors that lead to negative effects for some adolescents are not clear, but there is a continuing effort to identify and understand this area. One plausible explanation for why some adolescents exhibit psychosocial and behavioral difficulties postdivorce may be attachment. Specifically, the types of relationship children have with their non-residential fathers. The father-child relationship in turn might be affected by the type of relationship adolescents have with their custodial mothers. Another factor may be the degree of conflict exhibited by the custodial mother toward the noncustodial father following a divorce. Parental conflict has been shown to have negative impact on psychosocial adjustment across a wide array of family structures and settings (Davies & Cummings, 1994: Erel & Burman, 1995), but has yet to be studied in the context of adolescents' perceived well-

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being and adjustment after divorce among different racial groups. The percentage of those who are divorced has increased across all racial groups, yet the vast majority of research on divorce focuses on the experience of Caucasians, leaving a considerable gap in the literature.

Contemporary changes in family structures and in social attitudes toward divorced families underscore the importance of studying the diverse roles fathers play in their children's lives (Harris & Salt, 1999). Given that almost half of the children born in the last 10 years will experience the divorce of their parents (Gallagher, 1996; Hetherington, 1992), there is growing concern about the consequences of father separation on the child. Currently, 23% of American children live primarily with their mothers compared with less than 3% living primarily with their fathers (U.S. Census Bureau, 2001). Consequently, divorce research has continued to focus primarily on families in which mother has custody and father is the visiting parent. Of those children not residing with their fathers, 35% see their father at least once per week and some several times per week (Selzer, 1998).

Divorce can be a prolonged process and many practitioners and researchers have focused on the consequences of this process on children's well-being. The literature indicates that parental divorce is significantly associated with child psychosocial adjustment (for reviews, refer to Amato, 1993; Amato & Keith, 1991); however, there is substantial variability in children's response to divorce (Amato, 1993; Jekielek, 1998; Seltzer, 1994; Whiteside & Becker, 2000). This variability has led to the investigation of family process

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variables that may explain the parental divorce-child psychosocial adjustment relationship. Parent-child relationships and parental conflict are among the family process variables that have been associated with the adjustment of children after parental divorce (Whiteside & Becker, 2000). Although few studies have examined family process variables to clarify the long-term association between parental divorce and psychosocial adjustment of older adolescents, father-adolescent and father-young adult relationships have been found to be significant predictors of young adult psychosocial adjustment (Summers, Forehand, Armistead, & Tannenbaum, 1998). Missing in the research is the examination of the father-adolescent relationship in relation to 1) the mother-adolescent relationship and 2) the degree of conflict exhibited by the mother toward the father following a divorce.

### Attachment Theory

Over the last several decades, attachment theory (Bowlby, 1969) has served as an important framework for conceptualizing the parent-child relationship. Parental attachment refers to the enduring emotional bond and feelings of security children perceive in their relationship with parents. A basic premise of this theory is that the infant's initial experiences of attachment become cognitively represented in the form of "internal working models" of the self and others. These working models incorporate expectations about how worthy one is and how accessible and responsive others will be to providing support and protection. In regards to fathers, few studies have examined the benefits of paternal attachment in postdivorce families, and little research has

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specifically explored the effects of divorce on the father-child relationship. Amato and Booth (1996) found that some young adults who experienced divorce as children show less affection for their noncustodial father than for their custodial mother. Yet, why this is the case for some young adults and not others has not been identified. We do know however that children who perceive their fathers as accepting, supportive, and trustworthy are more likely to report feeling closer to their fathers (Stevenson & Black 1995).

Influences of Attachment on Separated/Divorced Families

Secure attachment emerges from the supportiveness and safety of the child's environment (Thompson, Lamb, & Estes, 1982), which is affected by the type of relationship between the parents (Das Eiden, Teti, & Corns, 1995). When the caregiving environment changes because of parental separation or divorce. the style of attachment (secure versus insecure) may change as well (Asendorpf & Wilpers, 2000; Belsky, Campbell, Cohn, & Moore, 1996). Within families where mothers are the custodial parent, father-child attachment style has been shown to be vulnerable to changes in the caregiving environment (Cummings & Watson-O'Reilly, 1997) and to the relationship children have with their mothers (Doyle, Markiewicz, Brendgen, Lieberman, & Voss, 2000; Hojat, 1998). The influence of mothers on children's well-being is prevalent in the research. Within divorced families, children's attachment classifications have been found to change in relation to changes in maternal behaviors (Vaughn, Egeland, Sroufe, & Waters, 1997) and children's perceptions of maternal attachment, rather than paternal attachment, have been linked to psychosocial adjustment in adulthood

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(Hojat, 1998). In addition, mothers appear to have the ability to facilitate or impede the noncustodial father's involvement with his children (Braver, Wolchik, Sandler, Fogas, & Svetina, 1991), thereby encouraging or dissuading the father-child relationship. A next step in this line of inquiry was to explore how children's attachment style with custodial mothers influenced children's attachment style with noncustodial fathers.

### Relationship between Maternal and Paternal Attachment

Attachment style is often viewed as stable and consistent across different relationships due to the strong influence of the internal working model (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987), however most researchers report independence in the attachment classifications for motherchild and father-child dyads (Grossman, Grossman, Huber, & Warner, 1981; Kenny, Lomax, Brabeck, & Fife, 1998; Main & Weston, 1981). In their metaanalyses of 14 studies. Van IJzendoorn and DeWolff (1997) stated, "By and large, infant attachment security does not appear to generalize substantially across relationships within the family system" (p. 607). They concluded that infant attachment security is more relationship-specific than infant-specific. However a meta-analyses of 11 studies involving 672 participants found that attachment to mother and attachment to father were interdependent (Fox. Kimmerly, & Schafer, 1991). That analysis indicated that children classified as secure to one parent are highly unlikely to be classified as insecure to the other parent and vice versa. Still other studies have found that attachment in parental relationships cannot be sufficiently captured without examining consistency

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across relationships as well as relationship-specific qualities. For example, Asendorpf and Wilpers (2000) found that changes in young adult attachment style reflected changes in their parental relationship style, and they also found support for cross-relationship consistency of attachment between the two parental relationships. The inconsistency of findings lent merit to further examination of the relationship between the three family dyads, i.e., the mother-child, the father-child, and the mother-father relationship. In a meta-analysis of 12 studies, Whiteside and Becker (2000) concluded that relationships children develop with their fathers cannot be viewed independently of the quality of the parental alliance. Custodial mothers serve as primary caregivers and have more direct influences on children's everyday activities, so it was important to explore whether children's style of maternal attachment influenced children's style of paternal attachment.

### Maternal Conflict With Fathers

Adolescent psychosocial adjustment has been associated with supportive co-parenting, low conflict between parents, and better personal adjustment of parents, while adolescent difficulties have been associated with continued anger and disagreement between parents (Hetherington, Cox, & Cox, 1982; Wallerstein & Kelly, 1980). According to Kurkowski, Gordon, and Arbuthnot (1993), children from divorced families are caught in the middle of parental conflicts significantly more often and experience more stress than children from intact homes. Ahrons (1994) found that fifty percent of white, middle-class divorced couples engage in bitter, open conflict and only twelve percent were able to create pleasant, low-

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conflict relationships after the divorce. Interparental conflict has been identified consistently as a major correlate of behavior problems in children across a wide array of family structures and settings (for reviews Davies & Cummings, 1994; Erel & Burman, 1995). A meta-analysis of 57 studies focusing on the style of paternal involvement indicated that enduring emotional bonds are more strongly associated with positive child outcomes than with frequency of contact (Amato & Gilbreth, 1999). However, without spending time with their children, it is less likely that fathers will have the opportunity to develop and/or maintain a quality relationship with their children. The level of father involvement after divorce can be substantially affected by the co-parental relationship (Hetherington, Cox, & Cox, 1982; McKenry, Price, Fine, & Servovich, 1992). Conflict with the former spouse is one of the major barriers to maintaining father involvement (Ihinger-Tallman, Pasley, & Buehler, 1993).

Interestingly, Whiteside and Becker (2000) in their meta-analysis discovered the impact of cooperation between parents and the level of father's involvement with children were different for the mother-child relationship than for the father-child relationship. Whereas cooperative parenting facilitated the father-child relationship through greater frequency of father visits with their children and higher-quality relationships with children, cooperative parenting, hostility between parents, and greater frequency of father visits were negatively related to the mother-child relationship style. Fathers that were less collaborative were associated with mothers that exhibited more warmth and support of children (Whiteside & Becker, 2000). Therefore, even though high conflict between

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parents interferes with the mother-child and father-child relationships, cooperative parenting and high paternal involvement may correspond with mothers having less time with their children and feeling less validated in their role as a mother. Thus, in addition to investigating the interdependence of the mother-child and father-child attachment style, it is important to evaluate the association between maternal conflict with fathers and father-child attachment style. If mothers benefit from less father involvement and poor father-child relationships, mothers may be consciously or subconsciously sabotaging their children's relationship with their fathers. In this study, the construct of maternal conflict with father will be measured by examining adolescent perceptions of maternal hostility toward father, maternal facilitation/ interference of paternal involvement, and cooperative parenting behaviors of mothers.

## Race, Separation/Divorce, and Attachment

A significant limitation of the literature on parental separation/divorce and adolescent adjustment is its exclusive focus on the experience of Caucasian, middle class children and adolescents (Hines, 1997; Ogbu, 1988). The percentage of those who are separated or divorced has increased across all racial groups. Census Bureau statistics show that in 2004, 15.5% of African Americans (4.3 and 11.2% respectively), 11.3% of Caucasians (1.7 and 9.6% respectively), and 10.6% of Hispanics (3.5 and 7.1% respectively) age 18 and over were separated or divorced (U.S. Bureau of the Census, 2005). African American and Hispanic children are more likely than Caucasian children to be living with one parent; 57% for African American children, 32% for Hispanic

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children, and 22% for White children in 1996 (U.S. Bureau of the Census, 1996).

Thirty-seven percent of these one-parent households are the result of parental divorce (U.S. Bureau of the Census, 1996).

It is imperative that researchers broaden their perspective in this area to encompass race and ethnicity. Separation and divorce rates are higher for African American families, but we know little about the effects of divorce and the influence of the parent-adolescent relationship on African American youth and the literature contains virtually no information on the effects of divorce on Hispanic youth (Hines, 1997). Although few studies have examined race/ethnicity to clarify the long-term association between parental divorce and psychosocial adjustment of older adolescents, those that have run analyses differentiating between African American and Caucasian youth report inconsistent results. Some researchers have reported no significant differences between African American and Caucasian adolescents' attachment style (Bakermans-Kranenburg, Van IJendoorn, & Kroonenberg, 2004; Mason, 2005; Schlack, 2003; Van IJzenboorn & Krooneneberg, 1988) or their response to parental divorce (Rice, Cunningham, & Young, 1997: Veneziano & Rohner, 1998; Zimmerman, Salem, & Maton, 1995), while others have reported significant differences (Dornbusch, Carlsmith, Bushwall, Ritter, Leiderman, Hastorf, & Gross, 1985; Farnworth, 1984; Hanson, 1999; Lopez, Melendez, & Rice, 2000).

A culturally infused understanding of attachment leads to the acknowledgement that parenting practices are embedded within the cultural context of a parent-child relationship and greater attachment-related autonomy or

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proximity is encouraged as an element of the working model and attachment style of that culture (Van IJzendoorn & Sagi, 1999). For example, the pattern of establishing extended families appears to be an adaptive strategy common to African American and Hispanic individuals (Harrison, Wilson, Pine, Chan, & Buriel, 1990). Three times as many African American children under the age of 18 live with their grandparents, as do Caucasian Americans (U.S. Bureau of the Census, 1996). Kenny and Perez (1996) found that 27% of minority students identified their primary attachment figure as someone other than a parent. A caregiving environment that consists of a network of more or less stable relationships between the individual and several caregivers may be optimal (Donley, 1993) and may shelter the adolescent from some of the negative consequences associated with parental divorce, including insecure attachment style and parental conflict. In this study, racial/ethnic differences in postdivorce parental relationships and well-being among African American, Hispanic, and Caucasian adolescents were explored.

# Age and Attachment

The role of attachment relationships in promoting well-being during late adolescence (18-23 year olds), has been receiving increased attention (Woodward, Pergusson, & Belsky, 2000). In an attempt to identify predictors of college adjustment and well-being among late-adolescent students, researchers have studied the influence of secure parental attachment (Armsden & Greenberg, 1987; Brack, Gay, & Matheny, 1993; Bradford & Lyddon, 1993; Kenny, 1987; Kenny & Donaldson, 1991; Larose and Boivin, 1998; Mattanah,

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Hancock, & Brand, 2004; Rice, Fitzgerald, Whaley, & Gibbs, 1995; Vivona, 2000). Parental figures serve as a secure base from which adolescents explore and as a source of comfort in times of stress (Kerns, Klepac, & Cole, 1996; Larson, Richards, Moneta, Holmbeck, & Duckett, 1996). From an adolescent developmental perspective, researchers found that adolescent development tends to proceed best when adolescents develop some autonomy from parents, while simultaneously maintaining an ongoing supportive and close parentadolescent relationship (Grotevant, 1989; Grotevant & Cooper, 1986). The experience of entering college has been described as a naturally occurring separation experience that activates attachment-related processing because the adolescent must navigate, explore, and master a novel environment (Kenny, 1987). A number of studies have shown that students securely attached to their parents report better social, academic and emotional well-being in college (Bradford & Lyddon, 1993; Holmbreck & Wandrei, 1993; Kenny & Perez, 1996; Larose & Boivin, 1998; Rice, et al. 1995; Schultheiss & Blustein, 1994), greater social connectedness with friends and less loneliness (Blain, Thompson & Whiffen, 1993; Brack, Gay, & Matheny, 1993), and greater psychological wellbeing (Armsden & Greenberg, 1987; Cavell, Jones, Runyan, Constantin-Page, & Velasquez, 1993; Vivona, 2000). The symbolic or physical presence of parental attachment figures can create conditions of safety, security, and guidance that enable students to explore the novel environment with feelings of confidence (Holmbreck & Wandrei, 1993; Papini & Roggman, 1992) and obtain mastery so that students are less likely to respond to challenges with disappointment and

feelings of helplessness (Armsden & Greenberg, 1987). The degree to which students exhibit well-being is strongly related to their style of parental attachment (Klasner & Pistole, 2003).

Although studies have included students from a variety of ethnic backgrounds, the influence of attachment theory on the well-being of college students has been studied mostly among white middle-class college students (Holmbreck & Wandrei, 1993; Kenny, 1987; Kenny & Donaldson, 1991; Rice & Cummins, 1996). As a result, little is known about attachment and well-being among nonmajority racial/ethnic groups (Kenny & Rice, 1995). For African American students at predominantly White universities, some researchers (Dewitt-Parker, 2000; Duesterhaus, 2004; Hinderlie & Kenny, 2002) found that parental attachment type was predictive of college well-being, the development of life goals, and the development of extrinsic aspirations. Other researchers have found secure parental attachment positively associated with psychological well-being among racially and ethnically diverse college students, including Hispanic and African American students (Kenny & Perez, 1996; Taub, 1995). These findings are consistent with the relationships found between parental attachment style and late-adolescent well-being among Caucasian samples. Additional evaluation of the influence of parental attachment style on lateadolescent well-being is warranted, particularly among majority and nonmajority students from divorced families. In this study, attachment to parents was examined by comparing mother-attachment and father-attachment with regard to

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three subscales: feelings of affects, parents' promotions of independence, and parents as sources of support.

### Other Background Variables

In addition to age, several other factors are frequently examined and/or controlled for in studies involving parental attachment and divorce. Potential covariates noted in the literature included postdivorce marital status (Lopez et al., 2000), frequency of father contact (Hetherington, et al., 1982; Wallerstein & Kelly, 1980), socio-economic status factors (Whiteside & Becker, 2000), current living arrangements (McCormick & Kennedy, 2000), time since divorce (Lewis, Feiring, & Rosenthal, 2000), number of children in household, household income. parental educations, and age (Hanson, 1999). All participants provided the following information: age, gender, race, socio-economic status (SES), educational level, SES and educational level of both parents, age at time of parent's separation, age at time of parent's divorce, length of the marriage, years resided in one-adult home, current living situation (e.g., parent, self, other), number of siblings, birth order, parents current marital status, age at time of remarriage, frequency of father contact currently and at time of divorce, and a description of contact with father. In addition, as measures of well-being may be confounded by social desirability (i.e., tendencies to answer questions in terms of social appropriateness rather than true well-being) and ethnic identity (i.e., attitudes and knowledge of who one is as a member of an ethnic group), a social desirability scale and ethnic identity measure was included in the data collection. After data was collected, it was analyzed to determine covariates. Covariates,

namely, unwanted variance, were controlled in the final analysis and are discussed in the results section.

#### Parental Attachment and Adolescent Well-being

The concept of well-being has been defined and measured in many different ways, by many different researchers (Adams, Bezner, & Drabbs, 2000; Adams, Bezner, & Steinhardt, 1997; Ardell, 1986; Depken, 1994; Greenburg, 1985; Travis & Callander, 1990). Within adolescent research, strong emphasis is placed on psychological and spiritual dimensions of well-being. Therefore, the dimensions of psychological and spiritual well-being will be measured in this study, in addition to the physical, social, emotional, and intellectual dimensions of well-being.

Noticeable emphasis on spirituality has been evident in the literature and research over the past fifty years (refer to Adams et al., 2000 for a review).

Dunn stated in 1966 that "we can no longer ignore the spirit.... as a factor in our medical and health disciplines... which are designed as though the sum total of our concern is for the body and the mind... leaving to metaphysics and religion the affairs of the spirit" (p. 216). Over the past couple decades, several researchers have included spirituality as a dimension of well-being (Chapman, 1987; Depken, 1994; Myers, 1992; Travis & Callander, 1990; Whitmer & Sweeney, 1992). Although the conceptualizations of the spiritual dimension vary among researchers, a common thread includes a sense of meaning and purpose in life (Adams et al., 2000; Chapman, 1987; Hettler, 1984; Seaward, 1995; Whitmer & Sweeney, 1992). Krippner (2005) defined spiritual as "an awareness

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of a broader life meaning that transcends the immediacy of everyday physical expediency" (p. 225). Likewise, Paulson (2005) defined spirituality as an awareness of a broader life meaning, extending beyond everyday matters and natural concerns. The conceptualization of spiritual well-being in this manner allowed students to respond to the spiritual questionnaire from either a secular or religious context. Based on their own belief systems, the students decided individually whether their sense of meaning and purpose in life was fulfilled via mystical peak experiences, connection to other people, linkage to a greater power than the self, or some other source. In this study, the spiritual dimension of well-being was defined as a positive sense of meaning and purpose in life.

Self-esteem has been empirically shown to be a good indicator of general psychological health and will be used in this study to measure adolescents' psychological well-being. In studies of adolescent's well-being, the adolescent's self-esteem is frequently assessed (Kenny, Lomax, Brabeck, & Fife, 1998; Leonardi & Kiosseoglou, 2000; McCormick, & Kennedy, 2000; Meyers, 1998). Self-esteem refers to an attitude of self-acceptance, self-approval, self-respect, and self-worth. Whereas parental divorce has been shown to have long-term detrimental effects on self-esteem (Billingham & Abrahams, 1998), several studies have shown that the level of adolescents' self-esteem is directly related to the style of attachment to parents (Carranza & Kilmann, 2000; Hojat, 1998; McCormick, & Kennedy, 2000; Meyers, 1998). Carranza and Kilmann (2000) found that young women in intact families who perceive their fathers as unapproachable and unsupportive demonstrate insecure attachment patterns

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and lower levels of self-esteem than those that perceive their fathers as approachable and supportive. In addition, Hojat (1998) reported that satisfaction with mother was significantly associated with higher self-esteem in their children.

McCurdy and Scherman (1996) found that adolescents who have experienced parental divorce and subsequent mother-custody arrangements are at risk for high conflict and poor quality of emotional attachment with fathers, which could limit their overall sense of well-being. Thus, the assertion that a positive relationship with mother is a protective factor against the adverse effects of divorce (McCombs & Forehand, 1989) has been contradicted by the finding that a conflictual relationship with even one parent is associated with poorer wellbeing (Lapsley, Rice, & Shadid, 1989; McCurdy & Scherman, 1996). Adolescent well-being appears to be associated with attachment to fathers, especially in the subscales of the affective quality of the relationship and fathers as sources of support (McCurdy & Scherman, 1996). The relationship between adolescents' well-being and style of attachment with custodial mothers and with noncustodial fathers has supplied valuable information regarding the adolescents' overall adjustment to the divorce environment and has provided insight and direction for practitioners working with families, divorcing parents, and adolescents.

#### Research Questions

Numerous attempts have been made to account for the differences in children's reactions to parental divorce. Variables such as maternal stress, parenting style, conflict between parents, absent parents, custody arrangements, schedules, economic resources, parental behavior, attachment quality and

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environmental factors (e.g., remarriage, father adjustment, mother adjustment) have all been researched (Whiteside & Becker, 2000). However, few, if any, studies have simultaneously examined parent-adolescent attachment style, maternal conflict with father, gender, well-being and the interactional effects between these variables among African American, Hispanic, and Caucasian adolescents. The goal in this study was first to examine the main effects and interactive effects of style of maternal attachment and maternal conflict with father on the style of paternal attachment within each racial/ethnic group. This shed light on whether postdivorce style of maternal-adolescent attachment and maternal conflict with father each contribute important and unique variance to predictions of the style of the father-adolescent attachment and whether the interaction of these factors also contributes significant variance to these predictors. Secondly, an evaluation of the adolescents' general, psychological, and spiritual well-being provided some indication of the adolescents' internalization of the main effects and suggested possible impacts of these effects. Thirdly, other background variables (e.g., social desirability and ethnic identity) that were significantly related to focal variables were controlled for in order to enhance the overall predictive power of the results. Given these objectives, the following questions were addressed within and between each of the racial/ethnic groups:

- Among adolescents from divorced families, is there a relationship between
   a) the style of maternal attachment and the style of paternal attachment,
  - b) the degree of maternal conflict with father and the style of paternal

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- attachment, c) the style of maternal attachment and adolescents well-being, and d) the style of paternal attachment and adolescents well-being?
- 2. Among adolescents from divorced families, controlling for the quality of maternal attachment, does the degree of maternal conflict with father uniquely predict the style of paternal attachment?
- 3. Does the style of maternal attachment moderate the relationship between the degree of maternal conflict with father and the style of paternal attachment?
- 4. Among adolescents from divorced families, holding background variables constant, does maternal attachment style and maternal conflict with father uniquely predict the relationship between the style of paternal attachment and adolescent well-being?

### Summary and Hypotheses

Attachment theory provides a strong conceptual framework from which to investigate the relational bond between parents and adolescents from divorced families. Yet, little research has been done applying the basic assumptions of attachment theory to the explanation of why some adolescents experience long-term effects of divorce while other adolescents do not. Even less research has been done in this area with postdivorce African American and Hispanic youth. In this study, the impact custodial mothers have on father-adolescent relationships and adolescent well-being was evaluated for African American, Hispanic and Caucasian adolescents.

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The purpose of this study was to explore the associations of both 1) maternal attachment and 2) maternal conflict with father with paternal attachment and well-being among adolescents from divorced families. Drawing from attachment theory and the literature on divorce, it was hypothesized that:

- Among adolescents from divorced families, secure attachment to mother
  and low levels of maternal conflict with father would correspond with
  secure attachment to father. Conversely, insecure attachment to mother
  and high levels of maternal conflict with father would correspond with
  insecure attachment to father.
- Secure attachments to parents would be associated with higher levels of general, spiritual, and psychological well-being, while insecure attachments to parents would be associated with lower levels of general, spiritual, and psychological well-being.
- 3. In regards to race/ethnicity, it was hypothesized that:
  - a. No significant differences would be found differentiating Hispanic and African American adolescents' from Caucasian adolescents' parental attachment patterns.
  - b. Hispanic and African American adolescents' would demonstrate significantly more adaptive coping strategies to insecure parental attachment style and maternal conflict with father as evidenced by greater overall well-being than the Caucasian adolescents' with insecure parental attachment style and higher levels of conflict.

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#### Literature Review

While the majority of adolescents from divorced families fall into the normal range on measures of both psychological and cognitive functioning (Kelly, 2000), many adolescents show prolonged negative reactions to the divorce process, and great variability exists amongst both of these groups (Jekielek, 1998; Seltzer, 1994; Whiteside & Becker, 2000). Parental divorce during childhood may adversely impact the style of the parent-child relationship, leading to long-term psychosocial adjustment difficulties (Emery & Forehand, 1994). The literature indicates that parental divorce presents unique obstacles to the development and maintenance of positive parental relationships, especially with noncustodial fathers. This section will review six lines of research relevant to the proposed study: 1) postdivorce father involvement and father-child relationships, 2) mother-child, father-child, and mother-father relationships, 3) parental conflict and child well-being, 4) attachment theory, 5) age and attachment, and 6) race/ethnicity.

Postdivorce Father Involvement and Father-Child Relationships

The population of divorced Americans continues to be substantially high, estimated at nearly 20 million in 1998, up from 11 million in 1980 (Raymond, 2001). Since 1960, the divorce rate in the United States has more than doubled and the last-reported U.S. divorce rate as of May, 2005, is 38% (National Center for Health Statistics, 2005). A meta-analysis of 37 studies examining the long-term relationship of parental divorce on children and adolescents found they were more likely to have psychological and social difficulties and to score lower

on measures of the quality of mother-child and father-child relationships (Amato & Keith, 1991). One proposed explanatory idea for these findings posits that the negative relationship between parental divorce and the adjustment of adolescents results from disrupted parent-child relationships (Emery & Forehand. 1994). Although the potentially negative effects of divorce can be mitigated by children maintaining good relationships with both parents (Barnes, 1999), several studies indicate a precipitous decline in father contact after divorce, with 23% to 30% of sampled children and sampled fathers reporting no contact with each other during the first year postdivorce (Furstenberg, Morgan, & Allison, 1987; Mitchell, 1985; Seltzer, Schaeffer, & Charng, 1989). Attempts to elucidate the reasons for the decrease in noncustodial father-child contact after divorce have been minimal (Dudley, 1991), with most efforts identifying loosely connected predictors of father involvement (Stone & McKenry, 1998). However, since fathers with high frequency of visitation are more likely to have high-quality relationships with their children (Whiteside & Becker, 2000), and high-quality relationships are positively related to children's well-being (Hetherington, Cox, & Cox, 1982), lack of father involvement following divorce needs to be understood. To do this, the father-child relationship needs to be examined in the context of both the level of father's involvement and the relationship between the parents.

The research conducted by Hetherington, Cox, and Cox (1982) and by Wallerstein and Kelly (1980) concluded that in the two years following parental separation, positive adjustment for children is associated with supportive coparenting and low conflict between parents, whereas child difficulties are

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associated with disagreement and inconsistency between parents and continued anger between parents. While supportive coparenting and low conflict between postdivorce parents is ideal, this request may present a tall order for parents to fill. No matter how smoothly parents manage the divorce process, when they part, they face the reality that the time children spend with one parent inevitably mandates separation from the other parent. The impact of this appears to be particularly relevant in regard to maternal role identity. Families with high paternal involvement and cooperation correspondingly have less residential time with mother and mothers may oppose the impact this has on their relationship with their children. For example, Little (1992) found that mothers were more satisfied with parenting when they had primary custody than when they have joint custody, indicating a preference for more maternal control of the mother-child and the father-child relationships. Kruk (1993) identified ways in which the custodial mother discouraged father contact and Lehr and MacMillan (2001) found that poor father relationships with custodial mother resulted in differences in access to the children as well as loss of day-to-day contact with them. These findings highlight the importance of evaluating the father-child relationship in relation to the mother-father dyad and the mother-child relationship.

Mother-Child, Father-Child, and Mother-Father Relationships

While most studies have focused on either the parent-child or the mother-father relationship, theorists and investigators have increasingly recognized that the different dyads within the family (mother-child, father-child, mother-father) are mutually interdependent (Cook, 1994; Lytton, 1990). A meta-analysis of 11

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studies involving 672 participants found that attachment to mother and attachment to father were significantly related (Fox, Kimmerly, & Schafer, 1991). In another meta-analysis of 12 studies, researchers report consistent positive correlations between mother-child attachment style and father-child attachment style (Whiteside & Becker, 2000). This means that when one parent has a good relationship with the child, it is likely that the other parent does also. Conversely, children classified as secure to one parent are highly unlikely to be classified as insecure to the other parent. Interdependence is found between the mother-child relationships, the father-child relationships, and the mother-father relationship's impact on child behaviors, yet each has unique distinctive influences. For example, Mathijssen, Koot, Berhulst, DeBruyn, and Oud assessed the relative association of the different family dyads and discovered that both the motherchild and the mother-father relationship were positively related to child behavior. However, whereas the mother-child relationship was consistently related to externalizing behavior of children, the mother-father relationship was particularly related to internalizing behavior of children. Offer, Ostrov, & Howard (1998) found that both mother-child and father-child relationship style significantly correlated with adolescents' self-image; however, the mother-child relationship had a greater influence. Miller and Stubblefield (1993) concluded that disclosure to mothers was more common than disclosure to fathers, but the strongest predictor of disclosure to one parent was disclosure to the other parent. These studies illustrate that the influence of family relations on the child cannot fully be understood by studying one dyad in isolation. Whiteside (1998) found that

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although a substantial number of studies examined the mother-child dyad following divorce, fewer have included information about the father-child dyad or the coparent alliance. The parent-child relationships and mother-father relationship must each be included when examining the relationships of family dynamics and between family dynamics and child well-being (Davies & Cummings, 1994; Rothbaum & Weisz, 1994).

#### Parental Conflict

Interparental conflict and the parent-child relationship have each been associated with child adjustment after parental divorce (Amato, 1993; Emery & Forehand, 1994; Summers et al., 1998). Supportive co-parenting, low conflict between parents, and better personal adjustment of parents are associated with adolescent psychosocial adjustment, while continued anger and disagreement between parents have been associated with adolescent difficulties (Hetherington. Cox, & Cox, 1982; Wallerstein & Kelly, 1980). According to Kurkowski, Gordon, and Arbuthnot (1993), children from divorced families are caught in the middle of parental conflicts significantly more often and experience more stress than children from intact homes. Ahrons (1994) found that fifty percent of white, middle-class divorced couples engage in bitter, open conflict and only twelve percent were able to create pleasant, low-conflict relationships after the divorce. Interparental conflict has been identified consistently as a major correlate of behavior problems in children across a wide array of family structures and settings (for reviews Davies & Cummings, 1994; Erel & Burman, 1995). In a recent meta-analysis, Amato and Keith (1991) found that parental conflict

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accounted for more of the negative consequences of divorce than both parental absence and economic disadvantage.

Interparental conflict plays a central role in the frequency of father visitation and consequently with the father-child relationship style (Whiteside & Becker, 2000). A meta-analysis of 57 studies focusing on the style of paternal involvement indicated that enduring emotional bonds are more strongly associated with positive child outcomes than with frequency of paternal contact (Amato & Gilbreth, 1999). However, without spending time with their children, it is less likely that fathers will have the opportunity to develop and/or maintain a quality relationship with their children. The level of father involvement after divorce can be substantially affected by the co-parental relationship (Hetherington, Cox, & Cox, 1982; McKenry, Price, Fine, & Servovich, 1992). Conflict with the former spouse is one of the major barriers to maintaining father involvement (Ihinger-Tallman, Pasley, & Buehler, 1993).

Continuing conflict with the ex-wife has been shown to impact both how fathers feel about their children and what they do in relation to them (Goldberg, 1990). Therefore, it is not surprising that parental conflict is related to insecure attachments (Lewis, Feiring, & Rosenthal, 2000), but it is interesting that conflictual mother-father relations have more negative effects on father-child relations than on mother-child relations (Cummings & Watson-O'Reilly, 1997). Similarly, a meta-analysis conducted by Whiteside and Becker (2000) demonstrated that the impact of cooperation between parents and the level of father's involvement with children were different for the mother-child relationship

than for the father-child relationship. Cooperative and supportive coparenting skills were significantly associated with greater frequency of father visits and father-child relationship style, whereas cooperation and greater frequency of father visits negatively related to the mother-child relationship style (Whiteside & Becker, 2000). Fathers that were less collaborative were associated with mothers that exhibited more warmth and support of children (Whiteside & Becker, 2000). Orbuch, Thornton, and Cancio (2000) found that the motherdaughter relationship improved after divorce. Therefore, even though high conflict between parents interferes with the mother-child and father-child relationships, cooperative parenting and high paternal involvement may correspond with mothers having less time with their children and feeling less validated in their role as a mother. Thus, a more complex relationship between divorce, parental conflict, and child well-being is implied. If mothers benefit from less father involvement and poor father-child relationships, mothers may be consciously or subconsciously sabotaging their children's relationship with their fathers. Hanson's (1999) results suggested that children's exposure to conflict accounted for about 11% of the effects of divorce on child well-being, suggesting that conflict only partially explains why parental divorce and child well-being are related. In this study, the construct of maternal conflict with father was measured by examining adolescent perceptions of maternal hostility toward father, maternal facilitation/ interference of paternal involvement, and cooperative parenting behaviors of mothers.

Attachment Theory

Over the last several decades, attachment theory (Bowlby, 1969) has served as an important framework for conceptualizing the parent-child relationship. Attachment theory is based on the notion that there are individual differences in the way infants become emotionally attached to their primary caregivers and that these differences influence a child's perceptions of self, others, and resources for emotional self-regulation in times of crisis (Bowlby, 1969). An infant's relationship with its caretakers evolves into a working model that organizes behavior (Ainsworth & Bowlby, 1991). Initially, attachment behavior manifests in crying, smiling, and vocalizing which serve to keep the infant in close proximity to the caregiver for purposes of protection (Bowlby, 1969). During the early stages of development, the infant forms internal representations of self, attachment figure, and the environment (Bowlby, 1969). The attachment system thereby becomes a component of the cognitive structure subject to developmental change as well as environmental influence (Ainsworth, 1989).

One basic principle of attachment theory is that attachment relationships continue to be important throughout the lifespan (Ainsworth, 1989). If the caregiver is experienced as warm, responsive, dependable, and encouraging of autonomy, secure attachment characterizes the relationship (Hazan & Shaver, 1987). However, if the caregiver is experienced as cold, neglectful, inconsistent, rejecting, or intrusive, an insecure attachment is likely to characterize the relationship (Hazan & Shaver, 1987). Assessments of attachment relations during adolescence have indicated continuity of both mother- and father-child

attachment over time (Lopez, 1996; McCormick & Kennedy, 1994), as well as similar proportions of persons in each attachment category as reported in infancy (Hazan & Shaver, 1987). Attachment security has been shown repeatedly to be an important correlate of social and emotional adjustment throughout the life span (Bartholomew & Horowitz, 1991).

One way to look at the caregiving environment is to examine the effects of separation/divorce on attachment styles. It is widely recognized that the caregiving environment, particularly maternal behavior and characteristics, is related to continuity of the attachment classification (Egeland & Farber, 1984). However, parental separation/divorce captures many aspects of the caregiving environment because it has a direct impact on parents, children, and the emotional and social experiences in the family (Davies, & Cummings, 1994). The decision to separate sets in motion a significant and potentially stressful transition that frequently includes intense negative emotion and disruption of everyday structures and routines. Thus separation/divorce provides the type of environment that impacts early childhood attachment as well as effecting change in attachment representation (Lewis, et al., 2000). Subsequently, we know that the processes associated with the marital separation experience tend to change the parent-child relationship, but it is difficult to ascertain exactly which variables are significant in this transformation of parent-child relationships. So the parental behaviors and the coparenting partnership should be considered jointly to understand the full set of influences on the child.

Points in time of parental separation and of parental divorce are seldom differentiated within the divorce literature and the terms are used interchangably. Several of the more recent studies use both terms in reference to the breakup of a parental relationship. This may be in response to the growing number of parents that do not go through the legal process of marriage, and as a result, do not go through the legal process of a divorce. A child in a single-parent home in 1996 was as likely to be living with a parent who had never been married (36%) as with a parent who was divorced (37%) (U.S. Census Bureau, 2001). In the current study, participants' age at time of separation and age at time of divorce was requested and will be evaluated.

## Age and Attachment

In an attempt to identify predictors of college adjustment, researchers have studied the influence of secure parental attachment (Armsden & Greenberg, 1987; Brack, Gay, & Matheny, 1993; Bradford & Lyddon, 1993; Kenny, 1987; Kenny & Donaldson, 1991; Larose and Boivin, 1998; Mattanah, et al., 2004; Rice, et al., 1995; Vivona, 2000). A number of psychologists have emphasized the importance of autonomy and individuation as key developmental tasks facing late-adolescent college-students (Arnstein, 1980; Chickering, 1969). It has been proposed that students with a stronger and healthier sense of self will be better equipped to handle the challenge of disengaging from childhood and learning to function in the college environment as autonomous adults, including self-organization of coursework and preparation for exams, negotiating new social environments and relationships, and attention to career and identity issues

(Grayson, 1998; Kenny & Rice, 1995). From an adolescent developmental perspective, researchers found that adolescent development tends to proceed best when adolescents develop some autonomy from parents, while simultaneously maintaining an ongoing supportive and close parent-adolescent relationship (Grotevant, 1989; Grotevant & Cooper, 1985). Conversely, those adolescents who strive too strongly to separate from their parents appear isolated and withdrawn and are at increased risk of behavioral problems (Ryan & Lynch, 1989). Attachment is defined as an enduring emotional bond that forms between the parent and the child across the life span (Rice, et al., 1995) and secure parental attachment helps the adolescent develop a positive view of self and expect positive, supportive interactions with others (Griffin & Bartholomew, 1994).

The experience of entering college has been described as a naturally occurring separation experience that activates attachment-related processing because the adolescent must navigate, explore, and master a novel environment (Kenny, 1987). The college transition may be viewed correspondingly as a second "strange situation" (Kenny, 1990), in which adolescents with a history of secure attachment to their parents experience them as a secure base that anchors and supports exploratory behavior and provides anxiety-reducing functions (Baldwin & Fehr, 1995; Elicker, Englund, Sroufe, 1992; Hazan & Shaver, 1994). A number of studies have shown that students securely attached to their parents report better social, academic and emotional adjustment in college (Bradford & Lyddon, 1993; Holmbreck & Wandrei, 1993; Kenny & Perez,

1996: Larose & Boivin, 1998: Rice, et al. 1995; Schultheiss & Blustein, 1994). greater social connectedness with friends and less loneliness (Blain, Thompson & Whiffen, 1993; Brack, Gay, & Matheny, 1993), less psychologically distressing symptoms such as depression and anxiety, and less alcohol use (Armsden & Greenberg, 1987; Cavell, Jones, Runyan, Constantin-Page, & Velasquez, 1993; Vivona, 2000). The symbolic or physical presence of parental attachment figures can create conditions of safety, security, and guidance that enable students to explore the novel environment with feelings of confidence (Holmbreck & Wandrei, 1993; Papini & Roggman, 1992). Attachment security provides the resource for mastery so that students are less likely to respond to challenges with disappointment and feelings of helplessness (Armsden & Greenberg, 1987). In addition, students having the expectation that others will be helpful and responsive are more likely to approach faculty for assistance and to develop supportive friendships (Florian, Mikulincer, & Bucholtz, 1995; Lopez, 1996). Thus the degree to which students' well-being is resilient to the college transition is strongly related to their style of parental attachment (Klasner & Pistole, 2003).

Although studies have included students from a variety of ethnic backgrounds, the influence of attachment theory on the well-being of college students has been studied mostly among white middle-class college students (Holmbreck & Wandrei, 1993; Kenny, 1987; Kenny & Donaldson, 1991; Rice & Cummins, 1996). As a result, little is know about attachment and well-being among nonmajority racial/ethnic groups (Kenny & Rice, 1995). In a study of attachment and psychological well-being among racially and ethnically diverse

first-year college students, Kenny and Perez (1996) found the secure parental attachment was negatively associated with psychological symptoms of distress. For African American students at predominantly White universities, other researchers (Dewitt-Parker, 2000; Duesterhaus, 2004; Hinderlie & Kenny, 2002) found that parental attachment type was predictive of college adjustment, the development of life goals, and the development of extrinsic aspirations. Taub (1995) found that among Hispanic, African American and Caucasian students, one of the most significant independent contributors to autonomy among college students was the parental role of providing emotional support. These findings are consistent with the associations found between parental attachment style and late-adolescent well-being among white samples.

Additional evaluation of the influence of parental attachment style on lateadolescent well-being is warranted, particularly among majority and nonmajority
students from divorced families. College students from intact families may
perceive their parents as a greater source of support, display more career
decidedness, and exhibit more financial connectedness than students whose
parents are divorced (Scott, 1999). However, studies have found that growing up
with secure parent attachment, as compared to a preoccupied or dismissing
attachment style, may increase an adolescent's resilience to possible negative
effects of parental divorce (Hannum & Dvorak, 2004; Hayashi & Strickland,
1998). In this study, attachment to parents was examined by comparing motherattachment and father-attachment with regard to three subscales: feelings of
affects, parental promotion of independence, and parents as sources of support.

#### Race/Ethnicity and Attachment

As previously mentioned, the majority of research on divorce has focused on homogeneous samples drawn from White, middle-class contexts, with little attention given to African American or Hispanic marriages (Feldman & Elliott. 1990; Guidubaldi, 1988; Hines, 1997; Ogbu, 1988; Power, Hauser, & Kilner, 1989). According to Billingsley (1990), relatively little attention has been given to the impact of divorce on African Americans because of researchers' inability to dispel the pathological approach to black families which emphasizes singleparent families and teen pregnancies. Although African Americans are associated with unique types of family patterns, most studies on Black families have de-emphasized internal family dynamics and have focused on family pathologies (Billingsley, 1990, Crawley 1988). Statistics indicate that approximately 47% of African American women separate from their husbands within 10-15 years of marriage, compared with 28% of Caucasian women. Some researchers use this phenomenon to guide their research and explain their results. For example, Shaw, Winslow, and Flanagan (1999) stated,

"We also expected the effects of pre- and postdivorce marital status to be more pronounced among European American rather than African American children, due to the greater prevalence of two-parent families among European American families. That is, single-parent status may be accepted as more normative among

African American children regardless of whether or not a divorce has occurred" (p. 744).

The approach to African American families as a deviant form has obscured the diversity of African American families based on socialization experiences, geographical regions, and socioeconomic backgrounds (Lawson & Thomson, 1994). According to Ainsworth (1989), the attachment model is applicable across racial/ethnic settings, but some researchers have questioned the ethnic specificity and measure of the attachment construct (Le Vine & Miller. 1990). There is some evidence that African American adolescents may be particularly sensitive to interpersonal matters and family relationships (DeCindio, Floyd, Wilcox, & McSevency, 1983; Hughes & Demo, 1989) and that they perceive higher levels of intimacy with parents than do Caucasian adolescents (Cernkovich & Giordano, 1987), even after controlling for socioeconomic status (Giordano, Cernkovich, & DeMaris, 1993). African American adolescents have been found to value relationships with parents, particularly mothers, more highly than Caucasian adolescents (D'Augelli & Hershberger, 1992). Figures from the U.S. Bureau of the Census (2000) indicate that African American and Hispanic children will spend significantly longer periods in a single-parent, mother-headed household than Caucasian children.

In contrast to the above mentioned results, a meta-analysis of the longterm consequences of parental divorce for adolescent well-being found that the effect sizes tended to be stronger for Caucasians than for African Americans for separation and divorce, one-parent family status, material quality of life, occupational quality, and educational attainment (Amato & Keith, 1991).

Caucasian samples were associated with significantly stronger negative effect sizes than were African American or mixed-race samples (b = .14 and -.43, respectively; Amato & Keith, 1991). Other studies have found racial/ethnic similarities on measures of adolescent-parent relationships (Rice, Cunningham, & Young, 1997; Veneziano & Rohner, 1998; Zimmerman, Salem, & Maton, 1995). For example, in a study of 21 African American and 37 Caucasian fathers and their children, Veneziano and Rohner (1998) found that only perceived paternal acceptance was significantly related to African American and Caucasian children's psychological adjustment and that father involvement by itself was not related to either group's psychological adjustment.

Regarding marital conflict, African American women seem to exhibit greater levels of disrupted parenting before divorce than afterward, whereas Caucasian mothers tended to show more disrupted parenting following the marital separation than before (Shaw, Winslow, & Flanagan, 1999). These findings may be significant in explaining why African American females experienced less depression and adjusted more positively to single-parenthood than their Caucasian counterparts (Gove & Shin, 1989; Menaghan & Lieberman, 1986; Weiss, 1975). Lawson and Thomson (1994) found that African American men reported postmarital friendship relationships with former spouses and that these relationships satisfied their need for attachment, perhaps through shared parenting and social networks. This relationship between African Americans postdivorce mother-father dyads warrants further investigation.

Whereas the research on postdivorce parental relationships and adolescent well-being is limited for African Americans, it is virtually absent for Hispanic adolescents. In one study, Lindahl and Malik (1999) found more similarities than differences between Hispanic American and Caucasian families in a study of intact families, reporting that marital conflict and disengaged family alliances were associated with child behavior problems and dysfunctional patterns of family interaction in both ethnic groups. They concluded, "although some of the patterns of interrelatedness are influenced by culture, many are not. suggesting that ethnic differences may somehow, but not always, affect how family subsystems are related to one another" (Lindahl & Malik, 1999; p. 22). One significant difference Lindahl and Malik (1999) found was that a hierarchical parenting style was associated with boys' behavioral problems for Caucasian families, but not for Hispanic families. In Hispanic families, only lax and inconsistent parenting was associated with externalizing behaviors. This finding is supported by a study done by Zayas and Solari (1994).

In exploring the development of adaptive strategies, Zayas and Solari (1994) found Hispanic families place a lot of emphasis on family solidarity and on individuals' sense of obligation to the family. A parenting practice that incorporates these goals involves the insistence on children's conformity to parental and extended family authority (Zayas & Palleja, 1988). This strategy promotes the importance of family relatedness and helps in racial identity development of Hispanic children. Parental divorce may disrupt this adaptive strategy that helps to not only protect the family's continuity, but also to

preserves its culture. A goal of this study was to gain insight into internal family dynamics and extend the attachment literature to Hispanic families.

Healthy well-being, which is influenced by parental attachment style, is culturally defined (Rothman, Weisz, Pott, Mijake, & Morelli, 2000) and should be evaluated within cultural contexts. Parenting practices are embedded within the cultural context of the parent-child relationship and greater attachment-related autonomy or proximity is encouraged as an element of the working model and attachment style of that culture (Van IJzendoorn & Sagi, 1999). For example, the pattern of establishing extended families appears to be an adaptive strategy common to African American and Hispanic individuals (Harrison, Wilson, Pine, Chan, & Buriel, 1990). Three times as many African American children under the age of 18 live with their grandparents as do Caucasian Americans (U.S. Bureau of the Census, 1996). Kenny and Perez (1996) found that 27% of minority students identified their primary attachment figure as someone other than a parent. A caregiving environment that consists of a network of more or less stable relationships between the individual and several caregivers may be optimal (Donley, 1993) and may shelter the adolescent from some of the negative consequences associated with parental divorce, including insecure attachment style and maternal conflict with father. An understanding of the network of stable relationships may be important to obtaining a culturally infused theory of attachment.

In this study, racial/ethnic differences in postdivorce parental relationships and well-being among African American, Hispanic, and Caucasian adolescents

were explored. Though some inconsistencies exist, a synthesis of the literature appears to support the postulate that no significant differences will be found between Hispanic and African American adolescents' and Caucasian adolescents' pattern of attachment. According to Bakermans-Kranenburg, Van IJzendoorn, and Kroonenberg (2004), children of African American, Hispanic, and Caucasian families in the United States may be exposed to culturally specific experiences, but these do not alter the relationship between attachment security and emotional responsiveness and support of parents. However the research also appears to support the postulate that college students of color may be more resilient and less affected by the stressors associated with parental divorce.

Attachment theory should provide a strong conceptual framework for investigating the relational bond between parents and adolescents from divorced families. The purpose of this study is to explain why some adolescents fare well after the divorce of their parents while others do not. One underlying assumption of this study is that postdivorce relationships with both parents are important for the well-being of children. Parental divorce may adversely impact the quality of the parent-child relationship, leading to long-term psychosocial adjustment difficulties (Emery & Forehand, 1994). The literature indicates that parental divorce presents unique obstacles to the development and maintenance of positive parental relationships and overall well-being. Few studies have evaluated the impact of parental divorce and maternal conflict with fathers on parental attachment and the subsequent influence on adolescents' well-being.

The current study helps to fill this gap in the literature. Additionally, this study extends the attachment literature relevant to racial/ethnic groups and clarifies some of the inconsistencies reported in previous research.

#### Method

### **Participants**

The participants were 179 (141 female and 38 male) students recruited from a major research institution located in an urban setting (population exceeding 250,000) in the Midwest. The racial/ethnic composition was 52% White (n = 93; 76 female, 17 male), 32.4% African American (n = 58; 47 female, 11 male), and 15.6% Hispanic/Latino/Mexican American (n = 28: 18 female, 10 male). Age ranged from 18-24 (mean = 19.97). Education level included 66 freshman (36.8%), 41 sophomores (22.9%), 42 juniors (23.5%), 27 seniors (15.0%), and 3 graduate students (1.7%). All participants were from families in which biological parents divorced prior to age 16 and mothers had primary physical custody. Age of participant at time of parents' separation ranged from age one to age 16 (n = 122, mean = 7.3) and age of participants at time of parents' divorce ranged from birth to age 16 (n = 179, mean = 7.2 years). Fiftyseven students failed to indicate their age at the time of their parents divorce, but for those that did, no significant difference was found between age at separation and age at time of divorce (Cohen's d = .016; effect size = .008). Frequency of contact with father prior to age 18 included daily (n = 39, 22%), weekly (n = 73, 41%), monthly (n = 37, 21%), and a couple times a year (n = 30, 17%). Student participants were also single with no children and had at least an 8<sup>th</sup> grade reading level.

#### Measures

All participants completed the following self-report measures.

Personal data questionnaire (PDQ).

This questionnaire solicited demographic information from participants as well as information related to parents' divorce. The questionnaire included information on adolescents' age, gender, race, educational level, educational level of both parents, age at time of parents' separation, age at time of parents' divorce, length of the marriage, years resided in one-adult home, number of siblings, parents' current marital status, age at time of remarriage, frequency of contact with mother and with father currently and at time of divorce, and a brief description of contact with father.

Parental Attachment Questionnaire (PAQ; Kenny, 1987).

Parental attachment was operationalized along a continuous scale indicating the degree of maternal attachment and paternal attachment with regard to three subscales: feelings of affect, parental promotion of independence, and parents as sources of support. This measure provided full-scale attachment scores and individual subscale scores.

The Parental Attachment Questionnaire is a 55-item Likert scale designed to assess the perceptions of young adults about their parents' attitudes towards them and their relationships with their parents (Kenny, 1987). Fifty-two of the fifty-five items were used for this study. The three items that were omitted did not specifically address maternal and paternal attachment (e.g., "When I have a serious problem or an important decision to make, I work it out on my own without help," "When I have a serious problem or an important decision to make, I discuss the matter with a friend," and "When I have a serious problem or an

important decision to make. I talk to a professional, such as a psychologist. member of the clergy, etc."). The PAQ contains three subscales: affective quality of attachment, parental fostering of autonomy, and parental role in providing emotional support. Subjects answer each question using a five-point rating scale ranging from 1 (not at all) to 5 (very much). Scores are calculated for each of the three subscales, as well as aggregated to get a full-scale score. The higher the number, the more positive the relationship between the subjects and their parents, as perceived by the student completing the survey. Examples of items from the feelings of affects scale include, "During visits or time spent together, my mother/ father was a person I wanted to be with all the time." "During visits or time spent together, my mother/ father was a person towards whom I felt cool and distant," and "When I go to my mother/ father for help, I continue to feel unsure of myself." Examples of items from the autonomy scale include, "In general, my mother/ father respect my privacy," "In general, my mother/ father restrict my freedom or independence," and "In general, my mother/ father take my opinions seriously." Examples of items from the emotional support scale include, "Following time spent together, I leave my mother/ father with warm and positive feelings," "Following time spent together, I leave my mother/ father feeling let down and disappointed" and "When I have a serious problem or an important decision to make, I know that my mother/ father will know what to do." The reliability of the attachment measure was assessed by Kenny (1987) through test-retest and internal consistency methods. Test-retest reliability over a 2-week interval was .92 for the measure as a whole and ranged

from .82 to .91 for the three scales derived from factor analysis. Cronbach coefficient alpha was calculated for each of the three scales, yielding coefficients of .96, .88, and .88. Internal consistency for the entire measure is Cronbach alpha of .93 for male college students and .95 for female college students. Evidence of construct validity was obtained by correlating each of the three factor scales with subscales of the Moos Family Environment Scale (Moos, 1985). The three factor scales are theoretically consistent with Ainsworth et al.'s (1978) conceptualization of attachment as an enduring affective bond.

Inter-Parental Conflict Scale (IPC; Schwarz, 1999)

This construct measured the adolescent's perception of mother's negative feelings and behaviors regarding father. The Inter-Parental Conflict Scale (IPC) was designed to assess the frequency of overt conflict between spouses. There is a spousal form and a child form, but since this study sample included only children from divorced families, only the child form was used. It contains a list of 34 topics, grouped in four categories: finance and responsibility (6 topics), personal characteristics (13 topics), childrearing practices (12 topics), and family activities (3 topics). College students rated the frequency with which they perceived the mother initiated conflict over each of the 34 topics. IPC items are anchored on a 7-point Likert-type scale, ranging from 0 (never) to 6 (at least once a week). The total IPC score is obtained by taking the mean of numerical rating for all 24 topics. Some sample topics included "insensitivity," "methods of discipline," "providing financial assistance," "punctuality" and "father's degree of

involvement with children." The internal consistency for ratings by college students is .90 and the one-week test-retest reliability is .86 (Schwarz, 1999).

### Adolescent Well-being

The construct of adolescent well-being is defined as a state of being content and healthy and successful, permitting the experience of consistent, balanced growth. Several dimensions of well-being are involved in human existence, including psychological, spiritual, physical, social, emotional, and intellectual. As stated earlier, within adolescent research, strong emphasis is placed on psychological and spiritual dimensions of well-being (Adams, Bezner, & Drabbs, 2000; Adams, Bezner, & Steinhardt, 1997; Ardell, 1986; Depken, 1994; Greenburg, 1985; Travis & Callander, 1990) in comparison to the other four dimensions (e.g., physical, social, emotional, and intellectual). In this study, three measures of well-being were utilized in an attempt to capture the full essence of well-being among this college-aged population, therefore more weight was given to the psychological and spiritual dimensions of well-being in the total score of well-being. The standardized scores from the three measures of wellbeing were added to formulate an aggregated score of well-being. The Perceived Wellness Survey provided an estimate of all six dimensions of wellbeing and the Current Thoughts Scale provided an estimate of the psychological dimension of well-being. The spiritual dimension was measured using the Personal Meaning Index of the Life Attitude Profile – Revised. The spiritual dimension of well-being has been characterized as "one's meaning of life" by many researchers (Gatrad, Sadig, & Sheikh, 2003; Krippner, 2005; MacKinlay,

2001; Paulson, 2005; Schlesing, 2005). Krippner's (2005) definition of spiritual was "an awareness of a broader life meaning that transcends the immediacy of everyday physical expediency" (p. 225). Likewise, Paulson (2005) defined spirituality as an awareness of a broader life meaning, extending beyond everyday matters and natural concerns. In this study, the spiritual dimension of well-being was defined as a positive sense of meaning and purpose in life.

Based on their own belief systems, the students decided individually whether this meaning and purpose in life was fulfilled via mystical peak experiences, connection to other people, linkage to a greater power than the self, or some other source.

Current Thoughts Scale (CTS; Heatherton & Polivy, 1991).

This measure of state self-esteem represents the psychological dimension of well-being at the time the scale is completed. Self-esteem was operationalized along a continuous scale indicating the worthiness that the adolescent holds and maintains with regard to him or herself in social, academic, family and personal areas of experience at that particular time. The CTS is a 20-item self-administered inventory assessing attitudes toward the self in social, academic, family, and personal areas of experiences. Scores are indicators of the sense of worthiness that individuals hold toward themselves at that moment. CTS presents respondents with generally favorable (e.g., "I feel confident about my abilities") or generally unfavorable statements about the self (e.g., "I am worried about what other people think of me"), which they indicate as: not at all (1), a little bit (2), somewhat (3), very much (4), or extremely (5). The CTS is

scored as a Likert scale. The original sample for which the scale was developed in 1991 consisted of 428 undergraduates enrolled in Erindale college of the University of Toronto (mean age = 20.3). According to Heatherton and Polivy (1991), the measure of sampling adequacy (MSA) values for each item were found to all be over .80, indicating an acceptable ratio of interitem correlation in partial correlation coefficients (total MSA = .92). The scale also has a high degree of internal consistency ( $\alpha$  = .92) and a robust factor structure. Test-retest values ranged from .62 to .71.

Personal Meaning Index of the Life Attitude Profile – Revised (LAP-R; Reker, 1992).

In agreement with previous researchers, (Adams et al., 2000; Chapman, 1987; Hettler, 1984; Seaward, 1995; Whitmer & Sweeney, 1992), the spiritual dimension was defined as a positive sense of meaning and purpose in life. The conceptualization of spiritual well-being in this manner allows students to respond from either a secular or religious belief system. The 48-item LAP-R was designed to measure the multidimensional nature of attitudes toward life. The Personal Meaning Index (PMI) of the Life Attitude Profile – Revised (Reker, 1992) provides a focused measure of personal meaning toward having life goals, a mission or purpose, a sense of direction from past, present, and future, and having a logically integrated and consistent understanding of self, others, and life in general. The PMI is derived by summing the Purpose (PU) and Coherence (CO) dimensions. "Purpose provides thrust and direction to one's life. Implicit in purpose is the notion of worthwhileness and what is of central importance in a

person's life" (Reker, 1992; p. 14). The subscale contains 8 items scored from 1 (strongly disagree) to 7 (strongly agree). Total scores range from 8 to 56, with higher scores indicating a greater life purpose. Sample items include "Basically, I am living the kind of life I want to live," and "In achieving life's goals, I have felt completely fulfilled." In the initial psychometric study of the Life Attitude Profile-Revised, the internal consistency for the PU subscale was .86 (Reker, 1992), which compares favorably to the internal consistency found by Adams, Bezner, & Drabbs (2000), a = .87.

The Coherence dimension is defined as a global orientation that expresses the extent to which one has a pervasive, dynamic feeling of confidence that one's internal and external environments are predictable and that there is a high probability that things will work out as well as can reasonably be expected. "Implicit in coherence is a sense of order and reason for existence, a clear sense of personal identity, and greater social consciousness" (Reker, 1992; p. 15). The subscale contains 8 items scored from 1 (strongly disagree) to 7 (strongly agree. Total scores range from 8 to 56, with higher scores indicating a greater life purpose. Sample items include "I have a philosophy of life that gives my existence significance" and "I have a clear understanding of the ultimate meaning of life." In the initial psychometric study of the Life Attitude Profile-Revised, the internal consistency for the CO subscale was .82 (Reker, 1992).

Perceived Wellness Survey (PWS; Adams & Bezner, 1997).

Perceived wellness is the sense that one is living in a manner that permits the experience of consistent, balanced growth in the emotional, intellectual,

physical, psychological, social, and spiritual dimensions of human existence (Adams & Bezner, 1997). Sample items from each dimension are, respectively, "In general, I feel confident about my abilities," "In the past, I have generally found intellectual challenges to be vital to my overall well-being," "I expect to always be physically healthy," "In the past, I have expected the best," "My friends will be there for me when I need help," and "I believe there is a real purpose for my life." Each dimension is represented by 6 items ranging from 1 (very strongly disagree) to 6 (very strongly agree).

The dimensional scores are integrated into a wellness composite score by combining the magnitude or mean of each dimension with the balance or standard deviation among dimensions. Scores range from 3 to 29, with higher scores indicating greater wellness. The PWS has been shown to possess very good estimates of factorial and construct validity, as well as internal reliability (a = .91; Adams & Bezner, 1997), which compares favorably to the internal consistency found by Adams, Bezner, & Drabbs (2000), a = .91.

Marlowe-Crowne social desirability scale - M-C form C (Reynolds, 1982).

Measures of well-being and reports of parental relationship quality may be confounded by social desirability (i.e., tendencies to answer questions in terms of social appropriateness rather than true well-being), so a social desirability scale was included in the data collection. The Marlowe-Crowne social desirability scale – M-C form C is a 13 item short version of the original 33 item scale. The M-C form C demonstrates an acceptable level of reliability (Kuder-Richardson formula 20 = .76) and compares favorable with the reliability of the standard form

(KR<sub>20</sub> = .82) and M-C form XX (KR<sub>20</sub> = .79), although it has one-third less items than the original form. Concurrent validity was examined via correlations between the Marlowe-Crowne short form and the standard version and the Edwards Social Desirability Scale. The product-moment correlation coefficient with the standard version is .93 and with the Edwards scale it is .41. The correlation with the Edwards scale is consistent with the correlation of .35 found by Crowne and Marlowe (1960). Examples of items from the scale are "I am always courteous, even to people who are disagreeable" and "I have never deliberately said something that hurt someone's feelings." The shorter form is recommended as a viable short form for use in the assessment of social desirability response tendencies. This form is brief and easy-to-administer.

Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992).

Measures of well-being and reports of parental relationship quality may be confounded by ethnic identity (i.e., attitudes and knowledge of who one is as a member of an ethnic group), so an ethnic identity measure was included in the data collection. Phinney developed this 12-item, 4-point (1 = strongly disagree, 4 = strongly agree) instrument to address, conceptually and methodologically, ethnic identity as a general phenomenon across groups. The components measured by the MEIM are ethnic affirmation and belonging (feelings of attachment to one's group, ethnic pride, attitudes toward one's group) and ethnic identity achievement (understanding one's ethnicity, commitment and secure knowledge of who one is as a member of an ethnic group). The instrument also assesses attitudes toward ethnic groups other than one's own. Reliability for the

MEIM was established using two samples (the largest being high school participants) (Phinney, 1992). Examples of items from the measure are "I have a clear sense of my ethnic background and what it means for me" and "I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs." Because the current study involves a university sample, psychometric information for the college sample is reported. The reliability coefficient for the overall measure was .90. Reliability coefficients for the subscales were .86 for Affirmation and Belonging, .80 for Ethnic Identity Achievement, and .74 for Other-Group Orientation. The MEIM has subsequently been used in dozens of studies and has consistently shown good reliability, typically with alphas above .80 across a wide range of ethnic groups and ages. Design

Due to limitations in randomly assigning subjects and in manipulating the predictive variables, a correlational field study was the appropriate design to use in this research endeavor. Determining the relationships among the variables (e.g., the extent the variables are related) and causal modeling are of primary concern in this study. Correlational field designs are known to have good generalizability due to factors such as real life settings and naturally occurring variables. However, due to the lack of control in the experiment, there are potential threats to both internal and external validity. Conclusions drawn from causal modeling with correlational data are valid and unbiased only if the assumed model accurately represents the real causal processes (Tate, 1992). In order to minimize the extraneous error variance, 1) a thorough review of the

rature was provided, 2) clear operational definitions of each variable was

calculate and valid measures

re selected to evaluate each variable, 4) purposive sampling criteria were

defined, and 5) the data was analyzed utilizing techniques that best fit the

racteristics of the design and data.

### **Data**-Gathering Procedures

Participants were recruited via oral and written announcements in classes. ordanizations, and residential living areas. The recruitment announcement as ked students to voluntarily take part in a research project exploring young ad ults' perceptions of themselves and their parental relationships after the divorce of their parents. Participants completed all questionnaires either ind ividually or within a group setting. At the onset, the informed consent forms were administered and discussed. Subjects were informed that participation was **voluntary** and they could withdraw from the study if desired. Volunteers were assured that their privacy would be protected to the maximum extent permissible under the law. Consistent with the informed consent form, courses of action were discussed to address negative consequences should they present. After the consent forms were collected, each participant was given a packet of the questionnaires, which she or he took home to complete. Completed questionnaires were either returned to this investigator or to the classroom instructor to be picked up by this investigator. Each measure within a packet was coded so that the researcher knew which surveys were completed by the same

person, but no personally identifiable information was on any of the measures.

Packets were returned upon completion.

Each participant completed: Personal Data Questionnaire, Parental Attachment Questionnaire (PAQ), Inter-Parental Conflict Scale (IPC), Current Thoughts Scale (CTS), Personal Meaning Index of the Life Attitude Profile – Revised (PMI), Perceived Wellness Survey (PWS), Marlowe-Crowne Social desirability measure (M-C 3), and The Multigroup Ethnic Identity Measure (MEIM). The order of testing for each participant was randomized to control for order effects. Participants had as much time as needed to complete the forms, but total time was approximately 30-40 minutes. The investigator was available to answer questions. Persons who completed all forms had the opportunity to have their names entered into a drawing for one of three \$100 awards. Participants who opted to enter the drawing (all except two) provided their email addresses on the informed consent forms. Winners were drawn randomly from the informed consent forms and notified via email. Checks were sent via USPS. Copies of the UCHRIS approval, recruitment announcement, and consent form are provided in Appendix A.

### Data Analysis

Simple correlations and path analysis were appropriate to investigate this study's specific research questions and hypotheses. Multiple regression was used in performing path analysis. All variables were either continuous or dichotomous, so this type of analysis was the most powerful in determining the causal interrelationships among the variables, (i.e., how each predictor was

relating to each other in predicting paternal attachment and well-being). The analysis was completed separately for the two groups: Caucasians (N = 93) as one group and African American (N = 58) and Hispanic Americans (N = 28) as the second group. The data were assessed for significant findings within the groups and between the groups.

All model variables were screened for missing data outliers and tested for assumptions. Identification of outliers was done by conducting a preliminary regression to calculate Mahalanobis distance. The Explore procedure was completed to determine if any cases exceeded the chi square criterion of 16.27 (df =3) for the first path analysis and 24.32 (df =7) for the second path analysis. No outliers were found in either group. Creating scatterplots (see Figures B3, p. 131: C3, p. 140: D3, p. 152; and E3, p. 178) and residuals plots (refer to Figures B2, p. 130; C2, p. 139; D2, p. 152; and E2, p. 177) assessed test assumptions. The results suggested normality, linearity, and homoscedasticity of the data. Correlation matrices were then created for all the model variables (refer to Tables 4 and 5, p. 64; 8 and 9, p.72) and multicollinearity was evaluated. The presence of minimum and maximum relationship between independent and dependent variables was checked. At least moderately strong relationships were found between the full-scale independent variables and the dependent variables (r > .30). None of the correlations between the full-scale independent variables was greater than .70, so the assumption regarding multicollinearity was not violated. All variables were retained. SPSS also performed collinearity diagnostics on the variables as part of the multiple regression program and eliminated variables

accordingly. These analyses indicated that the assumptions of multiple regression have not been violated.

No statistical procedure for evaluating the assumptions of path analysis exists (for review of assumptions, refer to Mertler & Vannatta, 2003) since they deal specifically with the degree to which the causal model has been correctly specified. Conclusions drawn from causal modeling with correlational data, according to Tate (1998), are confined to the following limitation: the results of causal modeling are valid and unbiased *only if* the assumed model adequately represents the *real* causal processes. However, there is no empirical test that can evaluate the extent to which the correct model has been selected and described. Tate (1998) suggests that the credibility, reasonableness, and utility of a proposed model be used to address the assumptions regarding correct model specification. In the present study, the extensive literature review, formal theory, personal observations and experiences, and the empirical data all played a substantial role in bringing about the causal specification of the models, and as a whole lend credibility to the results.

Research question one was examined using simple correlations for each group (i.e., African American/Hispanic group and Caucasian group; refer to Table 4 and 5, p. 64; 8 and 9, p. 72). The style of maternal attachment was correlated with the style of paternal attachment by looking at the relationship between full-scale maternal attachment and full-scale paternal attachment, as well as the relationships between each of the attachment subscales (i.e., feelings of affects, parents' promotions of independence, and parents as sources of support). The

degree of maternal conflict with father was then correlated with full-scale paternal attachment and each subscale of paternal attachment. Full-scale maternal attachment and each subscale of maternal attachment were correlated with adolescent well-being and lastly, full-scale paternal attachment and each subscale of paternal attachment were correlated with adolescent well-being.

Adolescent well-being was analyzed using an aggregated score of well-being compiled from the three measures of well-being. The well-being scores were standardized so that the scores were expressed in standard deviations from the mean. The standardized scores from the three measures of well-being were then added to formulate an aggregated score of well-being. Using correlation analysis, ethnic identity and social desirability were found to be covariates within the African American and Hispanic group and social desirability co-varied with the dependent variables within the Caucasian group (refer to tables 6 and 7, p.

Regression analyses were conducted to establish the possibility of causeand-effect relationships among the set of variables that had been logically
ordered on the basis of literature and previous research. Using regression
analysis in this manner permitted an examination of whether or not the pattern of
intercorrelations among the variables fit my underlying theory of which variables
were affecting other variables. Specifically, stepwise regression analysis was
used to assess how maternal attachment style and maternal conflict with father
uniquely influence paternal attachment style and adolescent well-being.

Research questions 2, 3, and 4 each include multiple predictor variables and

were therefore examined using separate hierarchical MR analyses. The covariates of ethnic identity and social desirability within the African American and Hispanic group and social desirability within the Caucasian group were controlled by putting them in the multiple regression first, as a block. Regression analyses were conducted for the endogenous variables and the full-scale exogenous variables and then with the subscale exogenous variables.

Path analyses established the causal ordering of the variables for the African American and Hispanic group and the Caucasian group. Path coefficients for the full-scale variables can be seen in the first two path diagrams (Figure 1, p. 75 and Figure 2, p. 81). For the African American and Hispanic group, coefficients were then used to calculate the reproduced correlations through the path decompositions, which are displayed in Table B, p. 132. Reproduced correlations were calculated and were compared to the empirical correlations (refer to Table 11, p. 78). Only two reproduced correlations exceeded the criterion of a .07 difference. Thus, it was concluded that the revised model was consistent with the empirical data. The final step was to calculate the direct, indirect, and total effects for each endogenous variable (refer to Table 12, p. 78).

The path analysis for the Caucasian group resulted in only direct causal effects between the exogenous and endogenous variables and no significant relationship was found between paternal attachment and well-being (Figure 2 and Table 14, p. 81). Consequently, stepwise regression analyses were conducted again using the attachment subscales instead of the full-scale

attachment variables (refer to Figure 3, p. 84; Figures D4, D5, and D6, p. 155). Reproduced correlations were calculated through the path decompositions (refer to Table D, p. 153) and were compared to the empirical correlations (refer to Table 16, p. 85). Only two reproduced correlations exceeded the criterion of a .07 difference. Thus, it was concluded that the revised model was consistent with the empirical data. The next step in this analysis was to calculate the direct, indirect, and total effects for each endogenous variable (refer to Table 17, p. 86). The following step was to construct a path diagram for the African American and Hispanic group using the attachment subscales. Path coefficients for the subscale attachment variables superimposed into one path can be seen in path diagram 4 (p. 91) (refer to E4, E5, E6, pp. 183-184, for the individual paternal attachment subscale paths). Reproduced correlations through the path decompositions were calculated (refer to Table E, p. 179). Reproduced correlations were then compared to the empirical correlations (refer to Table 19, p. 90). The revised model was consistent with the empirical data. The final step was to calculate the direct, indirect, and total effects for each endogenous variable (refer to Table 20, p. 93).

# Significance

Utilization of a modeling process by which covariables were first entered in a stepwise fashion, followed by independent variables allowed for the relative influence of exogenous and endogenous variables to be illuminated.

Furthermore, this process allowed for an examination of how these influences changed to examine how these influences changed when other theoretically

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important variables were added to the equation. Significance of relationships was tested using correlations, stepwise multiple regression, and path analysis and provided an index of the relationship between the entire model and the outcome variables. The models convey which variables account for the most variation in the outcome variables, with the Beta weights indicating the relative contribution of each variable to the model. Delta R² indicates the amount of variance in the outcome variable that the model accounts for when controlling for the other variables and it indicates whether the interaction of the variables is explaining any variance in the dependent variable above and beyond the variables individually.

Prelimin

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#### Results

## Preliminary Analyses

Descriptive statistics are summarized in Tables A1, A2, A3, and A4, pp. 116-118. Cronbach's coefficient alphas are high, ranging from .844 - .957 (refer to Table A5, p. 118).

## Correlation Analyses

 Table 1
 Correlation Coefficients of Adolescent Well-being Measures

	Life Attitude Profile	State Self- Esteem	Perceived Wellness	Spiritual Dimension PWS
Life Attitudes Survey	1.00			
State Self-Esteem	.625**	1.00		
Perceived Wellness	.698**	.698**	1.00	
Spiritual Dimension PWS	.774**	.646**	.889**	1.00
Psychological Dimension PWS	.692**	.581**	.850**	.739**

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed)

Adolescent well-being is the endogenous variable of most interest in this study. Three separate measures of well-being (Life Attitude Profile, Current Thoughts Scale, and Perceived Wellness Survey) were included in an attempt to capture a thorough estimate of the variable. Life Attitude Profile measured spiritual well-being, Current Thoughts Scale measured psychological well-being, and Perceived Wellness Survey provided a general index of well-being. The Perceived Wellness Survey (PWS) addressed six dimensions of well-being, including spiritual wellness and psychological wellness. The correlation coefficients for the three measures and the two dimensions are provided in Table

1. As can be seen in the table, internal consistency was found among all the

<sup>\*</sup> Correlation is significant at the 0.05 level (2 tailed)

P/IND P/SUP ETH

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Table 3

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**Table 2** African American and Hispanic Group Correlation Coefficients of Wellbeing Scores and Independent Variables

	Aggregated Well-being Score	Psychological Well-being Score	Spiritual Well-being Score	General Well- being Score
M/Att	.644**	.575**	.611**	.679**
P/Att	.581**	.584**	.575**	.610**
M/CON	014	057	105	036
M/AFF	.612**	.612**	.639**	.702**
M/IND	.416**	.416**	.487**	.511**
M/SUP	.432**	.432**	.440**	.506**
P/AFF	.500**	.500**	.525**	.567**
P/IND	.633**	.633**	.566**	.551**
P/SUP	.361**	.361**	.378**	.432**
ETH	.488**	.549**	.546**	.542**
SocD	543**	515**	442**	501**

Maternal Attachment (M/Att), Maternal conflict with Father (M/CON), Paternal Attachment (P/Att), Maternal promotion of independence (M/IND), Maternal feelings of affect (M/AFF), Maternal feelings of support (MSUP), Paternal feelings of affect (P/AFF), Paternal promotion of independence (P/IND), Paternal feelings of support (P/SUP), Ethnic Identity (ETH), Social Desirability (SocD)

**Table 3** Caucasian Group Correlation Coefficients of Well-being Scores and Independent Variables

	Aggregated Well-being	Psychological Well-being	Spiritual Well-being	General Well- being Score
	Score	Score	Score	
M/Att	.399**	.280**	.487**	.443**
P/Att	.350**	.436**	.308**	.505**
M/CON	377**	421**	266**	405**
M/AFF	.351**	.206*	.420**	.387**
M/IND	.377**	.407**	.434**	.441**
M/SUP	.377**	.209**	.485**	.404**
P/AFF	.347**	.421**	.292**	.483**
P/IND	.276**	.351**	.228*	.448**
P/SUP	.333**	.410**	.343**	.462**
ETH	.372**	.250**	.399**	.384**
SocD	074	016	121	157

Maternal Attachment (M/Att), Maternal conflict with Father (M/CON), Paternal Attachment (P/Att), Maternal promotion of independence (M/IND), Maternal feelings of affect (M/AFF), Maternal feelings of support (MSUP), Paternal feelings of affect (P/AFF), Paternal promotion of independence (P/IND), Paternal feelings of support (P/SUP), Ethnic Identity (ETH), Social Desirability (SocD)

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed)

<sup>\*</sup> Correlation is significant at the 0.05 level (2 tailed)

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed)

<sup>\*</sup> Correlation is significant at the 0.05 level (2 tailed)

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measures, as well as between the two measures of psychological well-being (r = .58, p< .01) and the two measures of spiritual well-being (r = .77, p < .01).

The well-being scores were standardized and aggregated to form an estimate of spiritual well-being (Life Attitude Profile + spiritual dimension of PWS), an estimate of psychological well-being (Current Thoughts Scale + psychological dimension of PWS), and a total estimate of well-being, which included all three full-scale measures (Current Thoughts Scale + Life Attitude Profile + Perceived Wellness Survey). This total estimate of well-being is merely referenced as "well-being" in the analyses that follow. The scores from the Perceived Wellness Survey are referred to as general well-being. Each of the four estimates of well-being were then correlated with the other study variables and compared (refer to Tables 2 and 3).

Consistency was found between the four estimates of well-being and the other variables in this study. If a significant relationship was found with one estimate, it was also found with the other three, and conversely, if an insignificant relationship was found with one estimate, an insignificant relationship was found with the other three estimates. In addition, relationships were consistently either negative or positive across the estimate. Next, the statistical significance of the differences between the correlation coefficients was tested. The r values were converted into standard scores (i.e., z scores) and were then plugged into the following formula to obtain  $z_{obs}$  scores:  $z_{obs} = (z_1 - z_2)$  / the square root of  $(1/N_1 + 1/N_2)$ . Within the African American and Hispanic group, no statistically significant differences were found between any of the well-being estimate correlations for

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the same variable. Within the Caucasian group, one statistically significant difference was found. This difference was between the correlate for psychological well-being and mother as a source of support and the correlate for spiritual well-being and mother feelings of support, thereby indicating that maternal feelings of support explains significantly more of the variance in spiritual well-being than in psychological well-being.

Given that only 1 out of the 132 differences between correlations was significant, the researcher concluded that it would be redundant to run multiple regression with each of the four measures. The aggregated (total) score of well-being appears to be an inclusive and meaningful measure of well-being and represents adolescent well-being in the statistical analyses that follow. These findings indicate that secure attachments to parents are associated with higher levels of general, spiritual, and psychological well-being, while insecure attachments to parents are associated with lower levels of general, spiritual, and psychological well-being, thus supporting hypothesis two.

Pearson product-moment correlations among full-scale maternal attachment (M/Att), full-scale paternal attachment (P/Att), maternal conflict with father (M/CON) and well-being (WB) are shown in Tables 4 and 5 (p. 64). Consistent with prior research (e.g., Carranza & Kilmann, 2000; Hojat, 1998; McCormick & Kennedy, 2000; Meyers, 1998), maternal and paternal attachment were found to have a strong positive correlation with well-being within the African American and Hispanic group (r = 0.64, p < .01 and r = 0.58, p < .05, respectively) and a moderately strong positive correlation within the Caucasian

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fat co group (r = .40, p < .01 and r = .35, p < .01, respectively). Therefore, students with a more secure attachment style with either parent depicted a greater degree of sense of well-being. As hypothesized, paternal style of attachment was positively correlated with maternal style of attachment within both groups (r = 0.34, p < .01 and r = .23, p < .05, respectively) and negatively correlated with maternal conflict with father (r = -0.23, p < .05 and r = -0.31, p < .01, respectively). However, maternal style of attachment was not significantly correlated with maternal conflict with father, a finding that differs from prior research (e.g., Amato, 1993; Emery & Forehand, 1994; Lewis, Feiring, & Rosenthal, 2000; Summers et.al., 1998; Whiteside & Becker, 2000).

In summary, within both groups, there is a significant relationship between a) the style of maternal attachment and the style of paternal attachment, b) the degree of maternal conflict with father and the style of paternal attachment, c) the style of maternal attachment and adolescent well-being, and d) the style of paternal attachment and adolescent well-being. These findings support hypothesis one for both groups, that is, secure attachment to mother and low levels of maternal conflict with father correspond with secure attachment to father. Conversely, insecure attachment to mother and high levels of maternal conflict with father correspond with insecure attachment to father.

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**Table 4** African American and Hispanic Group Correlations of Main Variables

	M/Att	M/CON	P.Att	WB
M/Att	1.00			
M/CON	187	1.00		
P/Att	.336**	228*	1.00	
WB	.644**	014	.581*	1.00

Maternal Attachment (M/Att), Maternal conflict with Father (M/CON),

Paternal Attachment (P/Att), Well-being (WB)

**Table 5** Caucasian Group Correlations of Main Variables

	M/Att	M/CON	P.Att	WB
M/Att	1.00			
M/CON	040	1.00		
P/Att	.232*	314**	1.00	
WB	.399**	377**	.350**	1.00

Maternal Attachment (M/Att), Maternal conflict with Father (M/CON),

Paternal Attachment (P/Att), Well-being (WB)

Hypothesis two was also supported. Secure parental attachments had strong positive correlations with general, spiritual and psychological well-being. Within the Caucasian group, a moderately strong positive relation was found between maternal conflict with father and well-being, but within the African American and Hispanic group, the data indicated there was not a significant relationship. Thus, secure attachment to mother corresponds with secure attachment to father, yet interparental discord does not appear to influence the well-being of the child. While research supports negative impact of interparental conflict on adolescent well-being, it is important to remember that the majority of research has been done using predominantly Caucasian samples. A different pattern may exist with Hispanic and African American adolescents than is found among Caucasian students, contrary to hypothesis 3. Given these results and

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed)

<sup>\*</sup> Correlation is significant at the 0.05 level (2 tailed)

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed)

<sup>\*</sup> Correlation is significant at the 0.05 level (2 tailed)

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the finding that maternal attachment and maternal conflict with father were related to paternal attachment, but not to each other, nor consistently to well-being (even though paternal attachment was related to well-being), a more detailed analysis of the data was warranted.

In order to control unwanted variance that may be affecting or biasing the interpretations of the data, Pearson product-moment correlations were generated for several factors that have been identified as covariants in previous studies involving parental attachment and divorce. These factors are listed in Table 6 and 7, p. 67. The correlations between these factors and the dependent variables of this study (e.g., parental attachment, parental feelings of affect, paternal promotion of independence, father feelings of support, and well-being), are found in Table 6 for the African American and Hispanic group and in Table 7 for the Caucasian group. Age at time of separation was not included in the tables because it was not significantly different than age at time of divorce (Cohen's D = .016, effect size = .008) and 57 students failed to provide an age (37% of the African American and Hispanic group and 27% of the Caucasian group). In examining Table 6, two variables stand out as significant covariates, specifically, ethnic identity and social desirability. Both ethnic identity and social desirability had a strong relationship with well-being (r = 0.49 and -0.54, respectively, p < .01) and were treated as covariates in further analysis of the data. Ethnic identity also correlated with full-scale paternal attachment (r = 0.33, p < .05) and the three paternal attachment subscales (r = 0.33, 0.26, 0.22, p < .05, respectively), with the strength of the relationships ranging from small to

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medium. Social desirability correlated with paternal feelings of affect (r = -.023, p < .05) and paternal promotion of independence (r = -0.24, p < .05).

As is evident in Table 6, several other factors co-varied with the dependent variables of this study. While most of these significant relationships appear commonsensical (i.e., as students grow older they experience more autonomy-promoting behaviors from their fathers), the majority have small correlations (e.g., r = .10 - .29, Cohen, 1988), suggesting weak relationships and they were not included in the regression analysis as covariates. Even though the relationships were week, the significant positive relationships between 1) mother's education level and the paternal attachment subscales (r = 0.25, 0.31, 0.27; p < .05) and 2) adolescent well-being and mother's education level (r = 0.25, p < .05), father's education level (r = 0.29, p < .01), and the student's education level (r = 0.22, p < .05) are quite interesting and were addressed in the discussion section of this paper.

**Table 6** African American and Hispanic Group Pearson Correlation Coefficients of Endogenous Variables and Possible Covariates

or Endogenede variables a					
	P/Att	P/AFF	P/IND	P/SUP	WB
Age	.142	.091	.267*	.072	.267*
Education Level	.083	.052	.167	.036	.217*
Age at Divorce	.253*	.261*	.141	.276**	.159
Length parents Committed Rel.	025	.062	077	058	.007
No. of Siblings with same parents	.078	.146	.031	.024	.073
Freq maternal contact currently	172	093	258*	069	400**
Frequency maternal contact < 18	.071	.077	.131	.009	.017
Freq paternal contact currently	461**	481**	204	454**	127
Frequency paternal contact < 18	281**	341**	.142	467**	.228*
Mother's education level	.247*	.313*	.003	.275*	.250*
Father's education level	.017	.118	028	.045	.288**
Ethnic Identity	.327**	.330**	.256*	.216*	.488**
Social Desirability	182	233*	243*	.022	543**

Paternal Attachment (P/Att), Paternal feelings of affect (P/AFF), Paternal promotion of independence (P/IND), Father feelings of support ((P/SUP), Total Well-being measure (WB)

**Table 7** Caucasian Group Pearson Correlation Coefficients of Endogenous Variables and Possible Covariates

	P/Att	P/AFF	P/IND	P/SUP	WB
Age	.161	.146	.122	.166	.170
Education Level	.027	.004	.053	.026	.127
Age at Divorce	017	052	149	.135	207*
Length parents Committed Rel.	002	043	113	.136	199
No. of Siblings with same parents	069	078	252*	.105	163
Freq maternal contact currently	.005	.001	022	.025	241*
Frequency maternal contact < 18	.104	.101	.006	.150	021
Freq paternal contact currently	503**	478**	171	611**	257*
Frequency paternal contact < 18	497**	409**	251*.	663**	011
Mother's education level	.100	.136	.071	.030	.230*
Father's education level	.105	.117	057	.176	005
Ethnic Identity	.145	.131	.053	.203	.372**
Social Desirability	304**	326**	178	297**	074

Paternal Attachment (P/Att), Paternal feelings of affect (P/AFF), Paternal promotion of independence (P/IND), Father feelings of support ((P/SUP), Total Well-being measure (WB)

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed)

<sup>\*</sup> Correlation is significant at the 0.06 level (2 tailed)

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed)

<sup>\*</sup> Correlation is significant at the 0.06 level (2 tailed)

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It is important to note that the possible choices to questions about frequency of contact with parent (e.g., mother or father) included daily, weekly, monthly, couple times a year, and not at all. The responses were scored on a Likert scale ranging from 1 to 5, with 1 being daily. The negative correlations between frequency of contact and attachment subscales and well-being are therefore interpreted as higher levels of contact with parent are associated with more secure attachment styles and/or more positive well-being. These findings are consistent with prior research (Hetherington, et al., 1982; Wallerstein & Kelly, 1980). Several of these correlations involving frequency of contact with parent indicate a moderately strong relationship (r = .30 - .49, Cohen, 1988), but given the nominal nature of the data and the logical structure of the relationships (i.e., more contact, more secure attachment style, or vice versa, more secure attachment style, more contact), these correlations served as supportive evidence to other findings, but were not included in the regression analysis.

In examining the possible covariates with the Caucasian group (Table 7), only social desirability stood out as a significant covariate with paternal attachment (r = -0.30, p < .01) and the paternal attachment subscales of feelings of affect (r = -0.33, p < .01) and father feelings of support (r = -0.30, p < .01). All three were moderately strong relationships. Ethnic identity neither correlated with full-scale paternal attachment, nor any of the subscales of paternal attachment, yet it did have a moderately strong correlation with well-being and was thus evaluated for covariance in the regression analysis. Using stepwise multiple regression, ethnic identity did not account for a significant amount of the

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variance in well-being within the Caucasian group when the other independent variables were controlled.

The Caucasian group did not significantly correlate with as many extraneous variables as the African American and Hispanic group. The significant relationships (refer to Table 7, p. 67) not already mentioned, were weak (r = .10 - .29) or were between the dependent variables and frequency of contact with parent. Again, these variables were not included in the regression analysis for the reasons stated previously. It is interesting to note that within the Caucasian group, the only significant correlation between education level and the dependent variables was found between mother's education and adolescent well-being (r = 0.23, p < .05), unlike the African American and Hispanic group in which several significant relationships were related to education level.

To summarize the covariate data, ethnic identity and social desirability were significant covariates within the African American and Hispanic group and needed to be entered first when doing regression analysis. Within the Caucasian group, social desirability significantly correlated with the dependent variables and was thus entered first when doing multiple regression analysis. In addition, correlates of frequency of parental contact with the dependent variables promoted the idea that more secure attachment styles and more contact with parents go hand in hand.

Table 8 and Table 9 (p. 72) present the Pearson product-moment correlations among maternal conflict with father, well-being, and the subscales for maternal and paternal attachment. Within the Caucasian group, internal

consistency was found among the subscales for paternal attachment, (r = 0.75, 0.82, 0.53, p < .01), and among the subscales for maternal attachment (r = 0.64, 0.89, 0.52, p < .01). Within the African American and Hispanic group, internal consistency was found between paternal feelings of affect and both paternal promotion of independence (r = 0.54, p < .01) and father feelings of support (r = 0.88, p < .01), but only a moderate correlation was found between father feelings of support and paternal promotion of independence (r = 0.38, p < .01). A similar pattern was found among the maternal subscales in this group (r = 0.60, 0.84, and 0.30, respectively, p < .01). This pattern was evaluated later in light of additional analysis.

Examining the correspondence between secure attachment to mother with secure attachment to father within the African American and Hispanic group, six of the nine correlations among the subscales were significant. Paternal promotion of independence positively correlated with maternal feelings of affect, maternal promotion of independence, and maternal feelings of support (r = .43, p < .01; r = 0.40, p < .01; and r = 0.23, p < .05 respectively). Paternal feelings of affect positively correlated with maternal feelings of affect and maternal promotion of independence (r = 0.25 and 0.27, p < .01, respectively). Paternal feelings of support only correlated with maternal promotion of independence (r = .30, p < .01). Note that the strength of the correlation is similar to that found between paternal feelings of support and paternal promotion of independence (r = .38, p < .01) and a similar finding was found with the maternal subscales, that

is, maternal feelings of support only correlated with the paternal promotion of independence within the paternal attachment subscales (r = .23, p < .01).

Examining the variable maternal conflict with father, a significant negative relationship was found with maternal feelings of support (r = -0.24, p < .05), paternal feelings of affect (r = -0.29, p < .01), and paternal feelings of support (r = -0.26, p < .05). All six attachment subscales were positively related to adolescent well-being, four strong (r = 0.67, 0.51, 0.51, 0.61, p < .01) and two moderately strong (r = 0.48 and 0.38, p < .01). Despite these correlations, no relationship was found between maternal conflict with father and well-being and between maternal feelings of support.

Examining the correspondence between secure attachment to mother with secure attachment to father within the Caucasian group, four of the nine correlations among the subscales were significant. Paternal promotion of independence positively correlated with maternal feelings of affect and maternal promotion of independence (r = 0.32 and 0.32 respectively, p < .01). Paternal feelings of affect correlated weakly with only maternal feelings of affect (r = 0.21, p < .05). Paternal feelings of support correlated with only maternal promotion of independence (r = .32, p < .01) (as was the case in the African American and Hispanic group). Maternal feelings of affect did not correlate with any of the paternal attachment subscales. Examining the variable maternal conflict with father, a significant negative relationship was found with all three of the paternal attachment subscales (r = -0.24, p < .05, r = -0.38 and -0.30, p < .01).

**Table 8** Pearson Correlation Coefficients African American and Hispanic Group Attachment Subscales. Well-being, and Maternal conflict with Father

M/AFF	M/IND	M/SUP	I D/AFF			
		IVI/SUP	P/AFF	P/IND	P/SUP	WB
1.00						
.598**	1.00					
.843**	.304**	1.00				
.250*	.271*	.142	1.00			
.425**	.404**	.231*	.542**	1.00		
.108	.299**	.032	.878**	.381**	1.00	
.672**	.506**	.476**	.508**	.612**	.378**	1.00
088	172	235*	293**	004	255*	014
	.598** .843** .250* .425** .108 .672**	.598** 1.00 .843** .304** .250* .271* .425** .404** .108 .299** .672** .506**	.598** 1.00 .843** .304** 1.00 .250* .271* .142 .425** .404** .231* .108 .299** .032 .672** .506** .476**	.598** 1.00 .843** .304** 1.00 .250* .271* .142 1.00 .425** .404** .231* .542** .108 .299** .032 .878** .672** .506** .476** .508**	.598**       1.00         .843**       .304**       1.00         .250*       .271*       .142       1.00         .425**       .404**       .231*       .542**       1.00         .108       .299**       .032       .878**       .381**         .672**       .506**       .476**       .508**       .612**	.598**       1.00         .843**       .304**       1.00         .250*       .271*       .142       1.00         .425**       .404**       .231*       .542**       1.00         .108       .299**       .032       .878**       .381**       1.00         .672**       .506**       .476**       .508**       .612**       .378**

Maternal promotion of independence (M/IND), Maternal feelings of affect (M/AFF), Maternal feelings of support (MSUP), Paternal feelings of affect (P/AFF), Paternal promotion of independence (P/IND), Paternal feelings of support (P/SUP), Well-being (WB), Ethnic Identity (ETH), Social Desirability (SocD)

**Table 9** Pearson Correlation Coefficients Caucasian Group Attachment Subscales, Well-being, and Maternal conflict with Father

	M/AFF	M/IND	M/SUP	P/AFF	P/IND	P/SUP	WB
M/AFF	1.00						
M/IND	.640**	1.00					
M/SUP	.885**	.522**	1.00				
P/AFF	.211*	.181	.107	1.00			
P/IND	.305**	.317**	.146	.751**	1.00		
P/SUP	.180	.317**	.146	.824**	.533**	1.00	
WB	.351**	.377**	.377**	.347**	.276**	.333**	1.00
M/CON	022	195	.069	238*	377**	295**	377**

Maternal promotion of independence (M/IND), Maternal feelings of affect (M/AFF), Maternal feelings of support (MSUP), Paternal feelings of affect (P/AFF), Paternal promotion of independence (P/IND), Paternal feelings of support (P/SUP), Well-being (WB), Ethnic Identity (ETH), Social Desirability (SocD)

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed)

<sup>\*</sup> Correlation is significant at the 0.05 level (2 tailed)

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed)

<sup>\*</sup> Correlation is significant at the 0.05 level (2 tailed)

Unlike the African American and Hispanic group, within the Caucasian group, a moderately strong negative relationship was found between maternal conflict with father and adolescent well-being (r = -0.38, p < .01). All six attachment subscales had moderately strong positive relationships with adolescent well-being (r = 0.35, 0.38, 0.38, 0.35, 0.28, 0.34, p < .01), somewhat weaker relationships than found in the African American and Hispanic group. No relationship was found between maternal conflict with father and the maternal attachment subscales, thereby indicating that interparental conflict, even when perceived to be instigated by the mother, does not appear to influence 1) maternal attachment style nor 2) secure maternal attachment impact on Caucasian adolescent well-being.

To summarize Tables 8 and 9, within the African American and Hispanic group, there was a significant relationship between a) the degree of maternal conflict with father and paternal feelings of affect and support, b) the subscales of maternal attachment and adolescents well-being, and c) the subscales of paternal attachment and adolescents well-being. Six of the nine correlations between maternal attachment subscales and paternal attachment subscales were significant. These findings support hypothesis one, that is, secure attachment to mother and low levels of maternal conflict with father correspond with secure attachment to father. Conversely, insecure attachment to mother and high levels of maternal conflict with father correspond with insecure attachment to father. These findings suggest more specificity is warranted in defining the relationship between maternal attachment, paternal attachment, and

maternal conflict with father. The paternal attachment subscales appear to be affected differently by the different maternal attachment subscales and by maternal conflict with father.

These finding also support hypothesis two, namely, secure attachments to parents are associated with higher levels of adolescent well-being and insecure attachments to parents are associated with lower levels of adolescent well-being. The findings suggest that the strength of some subscales of attachment is more or less than that of other subscales in impacting adolescent well-being.

Within the Caucasian group, there is a significant relationship between a) the degree of maternal conflict with father and paternal feelings of affect and support, b) the subscales of maternal attachment and adolescent well-being, and c) the subscales of paternal attachment and adolescent well-being. Four of the nine correlations between maternal attachment subscales and paternal attachment subscales are significant. These findings support hypothesis 1, but suggest specific subscales of maternal attachment and maternal conflict affect specific subscales of paternal attachment. In addition, the differences between the two groups illustrated by these correlations suggest the hypothesis (3.a) that Hispanic and African American adolescents' parental attachment patterns are the same as Caucasian adolescents' parental attachment patterns may be inaccurate. On the other hand, these differences do lend support to the hypothesis (3.b) that Hispanic and African American adolescents possess more adaptive coping strategies in relation to maternal conflict with father than do Caucasian adolescents. Definitive conclusions require further analyses.

## Path Analysis

**Table 10** African American and Hispanic Group Pearson Correlation Coefficients Endogenous and Exogenous Variables Used in Path 1

	M/Att	M/Con	P/Att	WB	ETH
M/Att	1.00				
M/CON	187	1.00			
P/Att	.336*	228*	1.00		
WB	.644**	014	.581**	1.00	
ETH	.054	.147	.327**	.488**	1.00
SocD	435**	.243*	182	543**	053

Maternal Attachment (M/Att), Maternal conflict with Father (M/CON), Paternal Attachment (P/Att), Well-being (WB), Ethnic Identity (ETH), Social Desirability (SocD).

- \*\* Correlation is significant at the 0.01 level (2-tailed)
  - \* Correlation is significant at the 0.05 level (2 tailed)

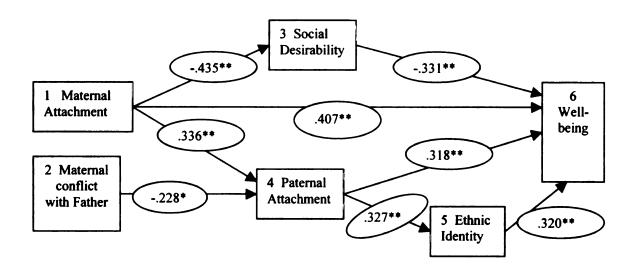


Figure 1 Input Path Diagram 1: African American/ Hispanic Group Path Analysis 1

Path analysis was completed after identifying the covariates and exploring the correlates between the independent and dependent variables. Straight, single-headed arrows, representing unidirectional paths, connect the boxes.

These straight arrows originate at the variable exerting the influence and point towards the variable being affected. Curved, two headed arrows represent correlations found between exogenous variables. The standardized path coefficients (b) represent the effect of a given predictor variable on the dependent variable after accounting for the remaining relationships in the model. The variables and Pearson product-moment correlations for this analysis are found in Table 10. The covariates of ethnic identity and social desirability were included in the model.

Figure 1 illustrates the first path analysis for the African American and Hispanic group. Path decomposition was used to examine goodness-of-fit. This process involved the identification of all legitimate paths between the variables in the model, resulting in a correlation coefficient equal to the product of all coefficients in that path. Correlational decompositions were determined for all possible bivariate correlations in the models, with the exception of those between exogenous variables. The decompositions and calculations of reproduced correlations for this path analysis can be found in Table B1 (p. 132). The reproduced correlations are displayed adjacent to the observed correlations in Table 11 (p. 78). Calculation of reproduced correlations through path decompositions and subsequent comparison to the empirical correlations indicated the model fits the empirical data.

For the African American and Hispanic group, a path analysis was conducted to determine the causal effects among the variables maternal attachment (M/Att), maternal conflict with father (M/CON), paternal attachment, (P/Att), and adolescent well-being (WB). Prior to the analysis, two covariates were identified (Table 6, p. 67) and added to the analysis, specifically, ethnic identity (ETH) and social desirability (SocD). Stepwise multiple regression was used to establish the causal effect relationships (refer to Figure B1, p. 120). The model was also tested without the inclusion of the ethnic identity and social desirability and the results did not fit the model (e.g., M/CON was positively correlated with WB and M/CON was not correlated with P/Att). All path coefficients were significant at or below the .05 level. Utilizing calculations from Table B (p. 132), the direct, indirect and total causal effects of the model are presented in Table 12, p. 78. R<sup>2</sup> is noted for each endogenous variable. The outcome of primary interest was adolescent well-being; the determinant with the largest total causal effect was maternal attachment (.693). The remaining determinants of adolescent well-being as indicated by the total causal effect were paternal attachment (.523), social desirability (-.331), ethnic identity (.320), and maternal conflict with father (-.096). This model explained approximately 78% of variance in adolescent well-being. The primary determinant of paternal attachment was maternal attachment (.336) with maternal conflict with father (-.228) following. Approximately 26% of the variance in paternal attachment was explained by the model. The primary determinant of ethnic identity was paternal attachment (.327), followed by maternal attachment (.110) and maternal conflict

Table 11 African American and Hispanic Group Path 1 Observed and

Reproduced Correlations (Table B1)

		Correlations				
·	M/ATT	M/CON	P/ATT	WB	<u>ETH</u>	
	Observe	d Correlations				
M/ATT	1.00					
M/CON	187	1.00				
P/ATT	.336	228	1.00			
WB	.644	014	.581	1.00		
ETH	.054	.147	.327	.488	1.00	
SocD	435	.243	182	543	053	
	Reprodu	ced Correlation	S			
M/ATT 1.00						
M/CON		1.00				
P/ATT	.336	228	1.00			
WB	.693	.096*	.608	1.00		
ETH	.109	075	.327	.424	1.00	
SocD	435		146	393*	048	

<sup>\*</sup>Difference >.07

Table 12 Summery for Causal Effects for African American and Hispanic Group Dath 1

Path	1			
Outcome	Determinant	Direct	Indirect	Total
P/Att	M/Att	.336*		.336
$(R^2 = .257)$	M/CON	228*		228
WB	M/Att	.407**	.286	.693
$(R^2 = .780)$	M/CON		096	096
	P/Att	.318**	.105	.523
	ETH	.320**		.320
	SocD	331**		331
ETH	P/Att	.327**		.327
$(R^2 = .107)$	M/Att		.110	.110
	M/CON		075	075
SocD $(R^2 = .189)$	M/Att	435**		435

<sup>\*\*</sup> Direct effect is significant at the .01 level.

<sup>\*</sup> Direct effect is significant at the .05 level.

with father (-.075). Approximately 11% of variance in ethnic identity was explained by the model. The primary determinant of social desirability was maternal attachment (-.435), which explained approximately 19% of the variance in social desirability.

To summarize, among African American and Hispanic students, secure maternal attachment and low levels of maternal conflict with father had a direct causal influence on secure paternal attachment. This means that when the style of maternal attachment was controlled, the degree of maternal conflict with father uniquely predicted the style of paternal attachment. In addition, through its impact on paternal attachment, maternal attachment had an indirect impact on adolescent well-being, in addition to its direct influence. Maternal attachment did not correlate with maternal conflict with father, which means the style of maternal attachment did not moderate the relationship between the degree of maternal conflict with father and the style of paternal attachment. However, both maternal attachment style and maternal conflict with father uniquely predicted the relationship between the style of paternal attachment and adolescent well-being (i.e., in addition to its direct influence, paternal attachment had an indirect influence on well-being stemming from the impact of maternal attachment and maternal conflict with father). This path analysis also indicated that students with secure maternal attachment tend to have more of an attitude of openness and acceptance of shortcomings (i.e., maternal attachments' impact on social desirability) than students with insecure maternal attachment. Paternal

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attachment has a moderately strong influence on ethnic identity, which in turn, has a moderately strong influence on adolescent well-being.

The first path analysis for the Caucasian group is presented in Figure 2, p. 81. Straight, single-headed arrows, representing unidirectional paths, connect the variables. These straight arrows originate at the variable exerting the influence and point towards the variable being affected. As illustrated, this path diagram consists of only bivariate connections, that is, a variable is either endogenous or exogenous, and so no path consists of more than two variables. There are also no correlations found between the exogenous variables (i.e., maternal attachment, maternal conflict with father, and social desirability), thus there are no curved, two headed arrows present. The standardized path coefficients (b) represent the effect of a given predictor variable on the dependent variable after accounting for the remaining relationships in the model. The variables and Pearson product-moment correlations for this analysis are found in Table 13, p. 81. The covariate social desirability was identified previously and was included in the model.

**Table 13** Caucasian Group Pearson Correlation Coefficients
Endogenous and Exogenous Variables Used in Path 1

	M/Att	M/Con	P/Att	WB
M/Att	1.00			
M/CON	040	1.00		
P/Att	.232*	314**	1.00	
WB	.399**	377**	.350**	1.00
SocD	037	074	304**	074

Maternal Attachment (M/ATT), Maternal conflict with Father (M/CON), Paternal Attachment (P/Att), Well-being (WB), Ethnic Identity (ETH), Social Desirability (SocD).

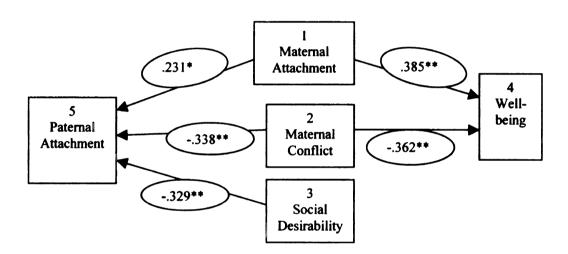


Figure 2 Input Path Diagram 2: Caucasian Group Path Analysis 1

**Table 14** Caucasian Group Path 1 Observed Correlations and Standardized Path Coefficients

	001110101110		
	M/Att	M/CON	SocD
Observed r			
P/Att	0.232	-0.314	-0.304
WB	0.399	-0.377	
Standardized b			
P/Att	0.231	-0.338	-0.329
WB	0.385	-0.362	0.000

Maternal Attachment (M/Att), Paternal Attachment (P/Att), Maternal conflict with father (M/CON), Social Desirability (SocD), Well-being (WB).

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed)

<sup>\*</sup> Correlation is significant at the 0.05 level (2 tailed)

<sup>\*</sup>Indicates differences > .05.

Figure 2 illustrates the first path analysis for the Caucasian group. Path decomposition is typically used to examine goodness-of-fit. This process involves the identification of all legitimate paths between the variables in the model, resulting in a correlation coefficient equal to the product of all coefficients in the path. However, in this path analysis, all legitimate paths are only one-way, bivariate paths. Each variable is either endogenous or exogenous and there are no significant relationships between the exogenous variables. Therefore, the standardized path coefficient (b) equates to the product of all coefficients in that path. This means the standardized path coefficients were compared to the observed correlations (r) and are displayed in Table 14. Comparison of the coefficients in the table indicated no differences between observed correlation and standardized path correlation exceeded the .05 level, except for paternal attachment and adolescent well-being. The correlational analysis indicated a moderately strong correlation (r = .35, 0< .01) between paternal attachment and adolescent well-being. This relationship was fundamental to the current study and was lost during the stepwise multiple regression (Figure C1, p. 134) once maternal attachment and maternal conflict with father were controlled. Therefore, this model did not fit the empirical data and further analysis was warranted.

The correlational analysis of the attachment subscales (refer to Tables 8 and 9, p. 72) indicated that there were significant differences in how the subscales related to each other and to the other variable of this study (e.g., maternal conflict with father, adolescent well-being, ethnic identity, and social

desirability). These findings prompted the path analysis to be revised so that the attachment subscales were used in place of the full-scale measures. This analysis was completed for both groups. The variables and Pearson product-moment correlations for the Caucasian group analysis are found in Table 15, p. 84. The covariate of social desirability was included in the model, along with the main exogenous and endogenous variables.

Figure 3 is the second path analysis for the Caucasian group. It illustrates the superimposed path analyses of the three paternal subscales. The separate paths for each of the paternal subscales are found in Figures D4, D5, and D6, p. 155. Path decomposition was used to examine goodness-of-fit. All legitimate paths between the variables in the model were identified and resulted in a correlation coefficient for each path, which equals the product of all coefficients in the path. Correlational decompositions were determined for all possible bivariate correlations in the models, with the exception of those between exogenous variables. The decompositions and calculations of reproduced correlations for this path analysis can be found in Table D, p. 153. The reproduced correlations are displayed adjacent to the observed correlations in Table 16, p. 85.

Comparison of reproduced correlations and empirical correlations indicated the model fit the empirical data.

**Table 15** Pearson Correlation Coefficients Caucasian Group Endogenous and Exogenous Variables Used in Path 2

	LAUGU	illous vu	Habico C	/30a III I	uu 2				
	M/AFF	M/IND	M/SUP	P/AFF	P/IND	P/SUP	WB	ETH	SocD
M/AFF	1.00								
M/IND	.640**	1.00							
M/SUP	.885**	.522**	1.00	-					
P/AFF	.211*	.181	.107	1.00					
P/IND	.305**	.317**	.146	.751**	1.00				
P/SUP	.180	.317**	.146	.824**	.533**	1.00			
WB	.351**	.377**	.377**	.347**	.276**	.333**	1.00		
ETH	.384**	.252*	.512**	.131	.053	.203	.372**	1.00	
SocD	002	.054	.064	326**	178	297**	074	068	1.00
M/CON	022	195	.069	238*	377**	295**	377**	096	074

Maternal promotion of independence (M/IND), Maternal feelings of affect (M/AFF), Maternal feelings of support (MSUP), Paternal feelings of affect (P/AFF), Paternal promotion of independence (P/IND), Paternal feelings of support (P/SUP), Well-being (WB), Ethnic Identity (ETH), Social Desirability (SocD), Maternal conflict with father (M/CON)

<sup>\*</sup> Correlation is significant at the 0.05 level (2 tailed)

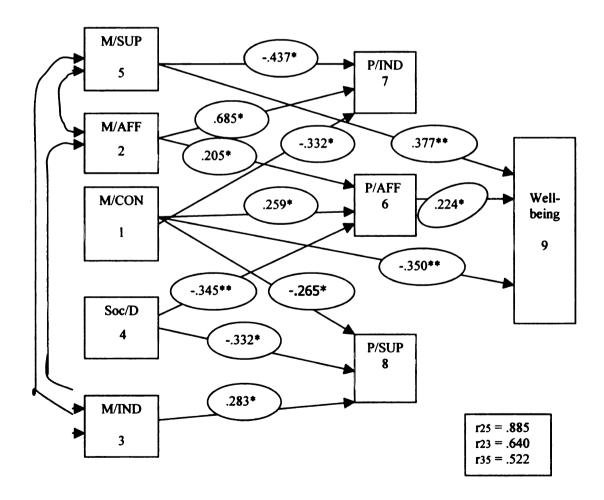


Figure 3 Input Path Diagram 3: Caucasian Group Path Analysis 2

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed)

<b>Table 16</b> Caucasian Group Path 2 Observed and Reproduced Correlations	Table 16	Caucasian	<b>Group Path</b>	2 Observed an	nd Reproduced	Correlations
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TADIO TO	M/AFF	M/IND	M/SUP	M/CON	P/IND	P/SUP		
					PAINU	PIOUP	PIACE	<u>WB</u>
		servea (	Correlation	<u>IS</u>				
M/AFF	1.00							
M/IND	.640	1.00						
M/SUP	.885	.522	1.00					
M/CON	022	195	.069	1.00				
P/IND	.305	.317	.146	377	1.00			
P/SUP	.180	.317	.146	295	.533	1.00		
P/AFF	.211	.181	.107	238	.751	.824	1.00	
WB	.351	.377	.377	377	.276	.333	.347	
SocD	002	.054	.064	074	178	297	326	<u>074</u>
	Reprod	uced Co	rrelations					
<b>M/AFF</b>	1.00							
<b>M/IND</b>		1.00						
M/SUP			1.00					
M/CON				1.00				
P/IND	.298	.211*	.169	332	1.00			
P/SUP	.181	.283	.148	265		1.00		
P/AFF	.205	.131	.181	259			1.00	
WB	.380	.226*	.378	408	.230	.280	.339	
SocD						332	345 ·	<u>077</u>

<sup>\*</sup>Difference >.07

Table 17 Summery for Causal Effects for Caucasian Group Path 2 Outcome

	Determinant	Direct	Indirect	Total
P/AFF	M/SUP			+
$(R^2 = .217)$	M/CON	259*		259
,	M/AFF	.205*		.205
	M/IND			+
	SocD	345**		345
P/SUP	M/SUP			+
$(R^2 + .262)$	M/CON	<b>265</b> *		265
•	M/AFF			+
	M/IND	.283*		.283
	SocD	332*		332
P/IND	M/SUP	437*		<b>43</b> 7 <sup>+</sup>
$(R^2 = .270)$	M/CON	332*		332
,	M/AFF	.685*		+
	M/IND	****		+
WB	M/SUP	.377**		.377 +
$(R^2 = .352)$	M/CON	350**	058	408
	M/AFF		.046	.046 +
	M/IND			+
	P/AFF	.224		.224
	SocD		077	077

<sup>\*\*</sup>Direct effect is significant at he .01 level.

For the Caucasian group, a path analysis was conducted to determine the causal effects among the variables Maternal promotion of independence (M/IND), Maternal feelings of affect (M/AFF), Maternal feelings of support (MSUP), Maternal conflict with father (M/CON), Paternal feelings of affect (P/AFF), Paternal promotion of independence (P/IND), Paternal feelings of support (P/SUP), Well-being (WB), and Social Desirability (SocD). Stepwise multiple regression was used to establish the cause-and-effect relationships (refer to Figure D1, p. 142). All path coefficients were significant at or below the

<sup>\*</sup>Direct effect is significant at the .05 level.

<sup>&</sup>lt;sup>†</sup> Total effect my be incomplete due to unanalyzed components

.05 level. Recall that in the first path analysis, the relationship between paternal attachment and adolescent well-being was no longer significant once maternal attachment and maternal control toward father were controlled. However, in the correlational analysis, P/Att and WB positively correlated (r = .35, p < .01). In this analysis, a direct relationship was found between paternal feelings of affect and well-being (r = .224, p < .05), but not between paternal feelings of support or paternal promotion of independence and adolescent well-being.

Utilizing calculations from Table D (p. 153), the direct, indirect and total causal effects of the model are presented in Table 17. R<sup>2</sup> is noted for each endogenous variable. Once again, the outcome of primary interest was adolescent well-being: the determinant with the largest total causal effect was maternal conflict with father (-.408). The remaining determinants of adolescent well-being as indicated by the total causal effect were maternal feelings of support (.377), and paternal feelings of affect (.224), social desirability (-.077) and maternal feelings of affect (.046). This model explained approximately 35% of variance in adolescent well-being. The primary determinant of paternal feelings of affect was social desirability (-.345) with maternal conflict with father (-.259) and maternal feelings of affect (.205) following. Approximately 22% of the variance in paternal feelings of affect was explained by the model. The primary determinant of paternal feelings of support was social desirability (-.332), followed by maternal promotion of independence (.283) and maternal conflict with father (-.265). Approximately 26% of the variance in paternal feelings of support was explained by the model. The primary determinant of paternal

promotion of independence was maternal feelings of support (-.437), followed by maternal conflict with father (-.332). Note the negative correlation between paternal promotion of independence and maternal feelings of support.

Approximately 27% of variance in paternal promotion of independence was explained by the model.

The second Path analysis for the African American and Hispanic group was completed, with the attachment subscales used in place of the full-scale attachment measures. The variables and Pearson product-moment correlations for the Caucasian group analysis are found in Table 18, p. 90. The covariates of ethnic identity and social desirability were included in the model, along with the exogenous and endogenous variables.

Figure 4, p. 91, is the second path analysis for the African American and Hispanic group. It illustrates the superimposed path analyses of the three paternal subscales. The separate paths for each of the paternal subscales are found in Figures E4, E5, and E6, pp. 183-184. Path decomposition was used to examine goodness-of-fit. All legitimate paths between the variables in the model were identified and resulted in a correlation coefficient for each path. Correlation decompositions were determined for all possible bivariate correlations in the models, with the exception of those between exogenous variables. The decompositions and reproduced correlations for can be found in Table E, p. 179. The reproduced correlations are displayed adjacent to the observed correlations in Table 19 (p. 90). The comparison of reproduced correlations and empirical correlations indicated the model fit the empirical data.

For the African American and Hispanic group, a path analysis was conducted to determine the causal effects among the variables Maternal promotion of independence (M/IND), Maternal feelings of affect (M/AFF), Maternal feelings of support (MSUP), Maternal conflict with father (M/CON), Paternal feelings of affect (P/AFF), Paternal promotion of independence (P/IND), Paternal feelings of support (P/SUP), Well-being (WB), Ethnic Identity (ETH) and Social Desirability (SocD). Stepwise multiple regression was used to establish the cause-and- effect relationships (refer to Figure E1, p. 157). All path coefficients were significant at or below the .05 level. Utilizing calculations from Table E (p. 179), the direct, indirect and total causal effects of the model are presented in Table 20 (p. 93). R<sup>2</sup> is noted for each endogenous variable. Once again, the outcome of primary interest was adolescent well-being; the determinant with the largest total causal effect was maternal feelings of affect (.604). The remaining determinants of adolescent well-being as indicated by the total causal effect were ethnic identity (.482), paternal feelings of support (.481), social desirability (-.373), paternal promotion of independence (.293), maternal promotion of independence (.164), paternal feelings of affect (-.146), and maternal conflict with father (-.003). Note the negative impact of paternal feelings of affect and social desirability.

 
 Table 18 Pearson Correlation Coefficients African American and Hispanic Group
 Endogenous and Exogenous Variables Used in Path 2

<del></del>	M/AFF	M/IND	M/SUP	P/AFF	P/IND	P/SUP	WB	ETH	SocD
M/AFF	1.00								
M/IND	.598**	1.00							
M/SUP	.843**	.304**	1.00						
P/AFF	.250*	.271*	.142	1.00					
P/IND	.425**	.404**	.231*	.542**	1.00				
P/SUP	.108	.299**	.032	.878**	.381**	1.00			
WB	.672**	.506**	.476**	.508**	.612**	.378**	1.00		
ETH	.134	.023	057	.330**	.256*	.216*	.488**	1.00	
SocD	494**	223*	394**	233*	243*	.022	543**	053	1.00
M/CON	088	172	235*	293**	004	255*	014	.147	.243*

Maternal promotion of independence (M/IND), Maternal feelings of affect (M/AFF), Maternal feelings of support (MSUP), Paternal feelings of affect (P/AFF), Paternal promotion of independence (P/IND), Paternal feelings of support (P/SUP), Well-being (WB), Ethnic Identity (ETH), Social Desirability (SocD)

Table 19 African American and Hispanic Group Path 2 Observed and **Reproduced Correlations** 

	M/AFF	M/IND	M/CON	P/IND	P/SUP	P/AFF	WB	ETH
	Obser	ved Corre	lations					
M/AFF	1.00					<u>-</u>		
M/IND	.598	1.00						
<b>M/CON</b>	088	172	1.00					
P/IND	.425	.404	004	1.00				
P/SUP	.108	.299	255	.381	1.00			
P/AFF	.250	.271	293	.542	.108	1.00		
WB	.672	.506	014	.612	.378	.508	1.00	
ETH	.134	.023	.147	.256	.216	.330	.488	1.00
SocD	494	223	.243	243	.022	233	543	053

	Repro	duced Co	orrelations					
<b>M/AFF</b>	1.00							
M/IND	.598	1.00						
M/CON			1.00					
P/IND	.395	.417	.030	1.00				
P/SUP	.150	.271	213		1.00			
P/AFF	.124*	.209	311			1.00		
WB	.683	.525	003	.539	.457	.117*	1.00	
ETH	.051	.085	.140	.217	.247	325	.374*	1.00
SocD	476	285	.201	187	120	122*	604	.004

<sup>\*</sup>Difference >.08

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed)
\* Correlation is significant at the 0.05 level (2 tailed)

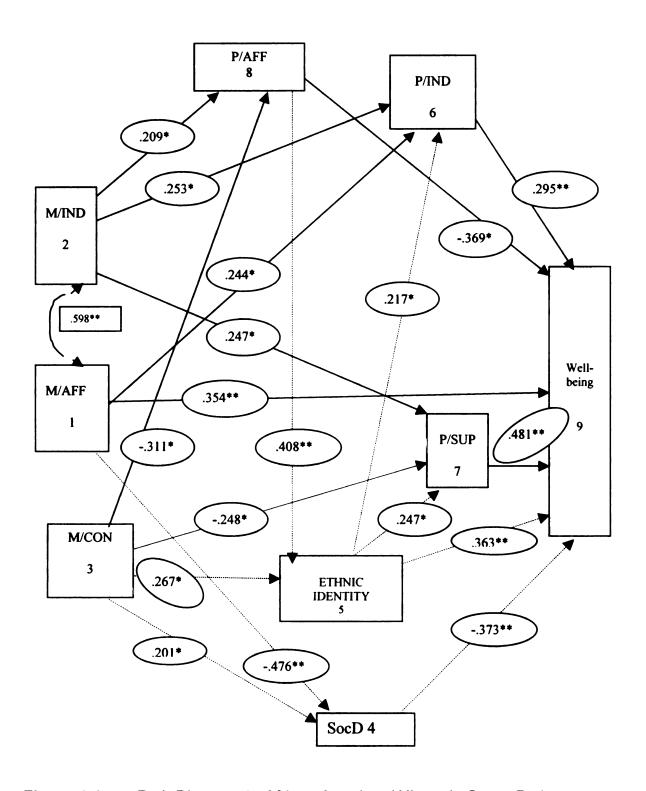


Figure 4 Input Path Diagram 4: African American/ Hispanic Group Path Analysis 2

This model explained approximately 79% of variance in adolescent wellbeing. The primary determinant of paternal feelings of affect was maternal conflict with father (-.311) with maternal promotion of independence (.209) following. Approximately 27% of the variance in paternal feelings of affect was explained by the model. The primary determinant of paternal feelings of support was maternal promotion of independence (.271) followed by ethnic identity (.247) and maternal conflict with father (-.213). Approximately 19% of the variance in paternal feelings of support was explained by the model. The primary determinant of paternal promotion of independence was maternal feelings of affect (.272), followed by maternal promotion of independence (.244), ethnic identity (.217), and maternal conflict with father (.030). Approximately 26% of variance in paternal promotion of independence was explained by the model. The primary determinant of ethnic identity was paternal feelings of affect (.408), followed by maternal conflict with father (.140) and maternal promotion of independence (.085). Approximately 17% of the variance in ethnic identity was explained by the model. The primary determinant of social desirability was maternal feelings of affect (.476), followed by maternal conflict with father (.201). Approximately 28% of the variance in social desirability was explained by the model.

Table 20 Summary for Causal Effects for African American and Hispanic Group

Path				<del></del>
Outcome	Determinant	Direct	Indirect	Total
P/AFF	M/IND	.209*		.209
$(R^2 = .270)$	M/CON	311*		311
,	M/AFF			+
P/SUP	ETH	.247*		.247
$(R^2 = .191)$	M/IND	.250*	.021	.271 <sup>+</sup>
•	M/CON	248*	.035	213
	M/AFF			+
P/IND	ETH	.217*		.217
$(R^2 + .262)$	M/IND	.244*		.244 +
	M/CON		.030	.030
	M/AFF	.253*	.018	.272 <sup>+</sup>
WB_	M/AFF	.354**	.250	.604 <sup>+</sup>
$(R^2 = .792)$	M/IND		.164	.164 +
	M/CON		003	003
	P/IND	.295**	-	.295
	P/SUP	.481**		. <b>481</b>
	P/AFF	369*	.223	146
	ETH	.363**	.119	.482
	SocD	373**	***************************************	373 <sup>+</sup>
SocD	M/AFF	47G**		476
	M/AFF M/IND	476**		476
$(R^2 = .282)$		.201*		204
	M/CON	.201		.201
ETH	M/AFF			+
$(R^2 = .174)$	M/IND		.085	.085
	M/CON	.267*	127	.140
	P/AFF	.408**		.408

<sup>\*\*</sup>Direct effect is significant at he .01 level.

\*Direct effect is significant at the .05 level.

\* Total effect my be incomplete due to unanalyzed components

#### Discussion

Parental Attachment, Interparental Conflict, and Adolescent Well-being

Four major findings emerged from this study. The first major finding concerns the impact of maternal attachment style and overt maternal conflict with fathers on paternal attachment style postdivorce. As predicted, maternal attachment style and maternal conflict with father were found to influence the style of paternal attachment within both groups. Contradictory to what was anticipated, maternal attachment style and maternal conflict with father were found to be unrelated. These findings are significant in that father-child attachment style had been shown to be vulnerable to the relationship children have with their mothers (Doyle, Markiewicz, Brendgen, Lieberman, & Voss, 2000; Hojat, 1998) and with the cooperative parenting relationship (Hetherington, et al., 1982; McKenry, et al., 1992; Ihinger-Tallman, et al, 1993; Whiteside & Becker, 2000). Custodial mothers serve as primary caregivers (U.S. Census Bureau, 2001) and have more direct influence on children's everyday activities and psychosocial development. The suggestion that the mother-child relationship may benefit from a lack of cooperative parenting and poor father-child relationships (Whiteside & Becker, 2000) was not supported by this study. The data gathered in this study indicated that the level of maternal conflict with father uniquely predicted the style of paternal attachment. Nevertheless, the style of maternal attachment did not impact the relationship between maternal conflict with father and the style of paternal attachment. These findings indicate that it is important to not just evaluate the relationship between maternal and paternal

attachment and adolescent well-being, but to do so within the context of family process variables that may explain the parental divorce-child psychosocial adjustment relationship. Interparental conflict has been identified consistently as a major correlate of behavior problems in children across a wide array of family structures and settings (for reviews Davies & Cummings, 1994; Erel & Burman, 1995). However, if the current model is accurate, it appears that within African American, Hispanic, and Caucasian divorced families, interparental conflict damages the father-child bond and thereby negatively affects adolescent well-being. Among the Caucasian adolescents, perceived maternal conflict had a direct negative affect on adolescent well-being, as well as on paternal attachment. Despite racial/ethnic affiliation, the findings of this study suggest the mother-child bond is resilient to and unaffected by perceived mother-initiated interparental conflict. Secure maternal attachment promoted adolescent psychosocial adjustment, independent of the level of maternal conflict with father.

The positive correlation between maternal attachment style and paternal attachment suggests that the influence of family relations on the child cannot fully be understood by studying one isolated relationship. When working with adolescents from divorced families, a key component appears to be the maternal style of attachment and how this style of attachment promotes or impedes the style of paternal attachment perceived by the adolescent (Davies & Cummings, 1994; Rothbaum & Weisz, 1994; Braver, et.al., 1991). Among African American and Hispanic college students, the perception of mothers as fostering autonomy corresponded with feelings of availability, understanding, acceptance, care,

respect and facilitation of autonomy from fathers. In addition, the data revealed an impact of the affective quality of the mother-adolescent relationship on the perception of fathers as promoting independence. However, the data did not reveal a relationship between the perception of mother as a source of support and the style of paternal attachment. Nor did the data reveal a relationship between the affective quality of the mother-adolescent relationship and perceived paternal feelings of support. This suggests that adolescents respond differently to mothers than they do to fathers, especially in divorced families. Among African American and Hispanic college students, mothers treating their adolescents as competent adults may open the door for adolescents and their fathers to establish affective and emotionally supportive relationships. Likewise, it appears that if mothers provide a secure foundation for the affective needs of the adolescent, the adolescent is more receptive to father's facilitation of autonomy.

The second major finding of this study concerns the relative importance of parental attachment and overt maternal conflict with fathers to adolescent well-being postdivorce. Within the African American and Hispanic group, the prediction that secure attachments to both mother and father would be associated with higher levels of general, spiritual, and psychological well-being was supported when the full-scale measures of attachment were analyzed (total causal effects .693 and .523 respectively). The large effects of adolescent-parent relationships on adolescent well-being were similar to other studies of maternal and paternal attachment (Amato & Booth, 1996; Hojat, 1998; Whiteside

& Becker, 2000). Nevertheless, interesting results were produced when the attachment subscales were analyzed instead of the full-scale measures. The perception of mother as a source of support had no effect on well-being or on any of the paternal attachment subscales, despite the moderately strong relationship found between maternal feelings of support and well-being in the correlational analysis (r = .377, p < .01). In addition, while maternal promotion of independence appeared to influence paternal promotion of independence, paternal affective quality of relationship, and fathers as source of support, all three of which influence adolescent well-being, maternal promotion of independence did not directly influence adolescent well-being. Correlational data had suggested a moderately strong relationship between maternal promotion of independence and adolescent well-being (r = .377, p < .01), but it was no longer significant once paternal attachment subscales were entered into the analysis. Conversely, maternal affective quality of relationship had a consistent influence on well-being (b = .354, p < .01; r = .351, p < .01), yet it only impacted the paternal attachment subscale of paternal promotion of independence (b = .244, p < .05). The perception of father both as a source of support and as promoting independence positively affected adolescent well-being (b = .481 and .295) respectively, p < .01). A finding of this study that contradicted previous research findings drawn from primarily Caucasian samples (Hetherington, Cox, Cox, 1982; Summers, Forehand, Armistead, & Tannenbaum, 1998) was that perceived paternal feelings of affect had a negative direct impact on adolescent well-being (b = -.369, p < .05).

These findings are indicative of how adolescents are influenced by their perceptions of their relationships with their mothers and with their fathers postdivorce. Noncustodial fathers have limited direct involvement in the daily lives of their children, Gecas and Schwalbe (1986) suggested that when fathers are involved, the importance of this involvement might be exaggerated in the mind of adolescents and thus take on greater importance than the daily involvement of the mother. Thus, African American and Hispanic collegeattending adolescents might perceive mother's facilitation of autonomy and conveyance of support as less important than similar behaviors by fathers. Paternal facilitation of autonomy and conveyance of support may be perceived as indicative of a caring and secure relationship, thereby enhancing the father-child relationship and adolescent well-being.

In regards to the affective quality of the relationship within the African American and Hispanic group, the data indicated that perceptions of mother as understanding, accepting, and considerate had a strong positive impact on adolescent well-being, whereas similar perceptions of father had a moderately strong negative impact on adolescent well-being. In secure relationships, parental figures often serve as secure bases from which adolescents explore and as sources of comfort in times of stress (Kerns, Klepac, & Cole, 1996; Larson, Richards, Moneta, Holmbeck, & Duckett, 1996). However, within divorced families, where mothers have physical custody, the limited time with father may consequently make the affective quality of the adolescent-father relationship more labile and vulnerable, thus exerting a paradoxical impact on the

adolescent's sense of well-being in conjunction with attending college. Several studies indicate a precipitous decline in father contact after divorce, with 23% to 30% of sampled children and sampled fathers reporting no contact with each other during the first year postdivorce (Furstenberg, Morgan, & Allison, 1987; Mitchell, 1985; Seltzer, Schaeffer, & Charng, 1989). Feelings or fear of abandonment of the noncustodial fathers when the student transitions to college may result in the secure father-adolescent affective relationship having a negative impact on well-being (b = -.369). Conversely, in regard to the mother-adolescent relationship that is based on daily contact, the secure mother-adolescent affective relationship may facilitate the transition to college by providing emotional assurance and stability (total effect = .604).

Among the Caucasian group, the absence of a relationship between paternal attachment and adolescent well-being in the first path analysis indicates the importance of including the different components of parental attachment in any analysis of parental attachment style. Findings and conclusions based upon the path analysis using the full-scale attachment measures would have been much different than those that were drawn from the analysis using the attachment subscales. These findings indicate that parent-child attachment styles may be much more complicated than can be accurately represented with a single measure. In addition, the correlations between maternal attachment style and paternal attachment suggest that the influence of family relations on the adolescent cannot fully be understood by studying one isolated relationship.

In regard to the first major finding of this study (i.e., the impact of maternal attachment style and overt maternal conflict with fathers on paternal attachment style) among Caucasian adolescents from divorced families, maternal promotion of autonomy facilitated the father-adolescent relationship as a source of support. A secure emotive relationship with mother facilitated a secure emotive relationship with father, as well as greatly impacting the adolescent's sense of security in father's promotion of autonomy. Maternal conflict with father uniquely predicted the style of paternal attachment within the three attachment subscales. Surprisingly, the perception of the mother-adolescent relationship as a source of support significantly impeded a sense of security and comfort with the father's promotion of autonomy. Thus, the hypothesis that low levels of maternal conflict with father would correspond with secure attachment to father is supported. Maternal attachment did not moderate the relationship between the degree of maternal conflict toward father and the style of paternal attachment. Similar to the African American and Hispanic group, maternal attachment and maternal conflict toward father were not correlated. The hypothesis that secure attachment to mother would correlate with secure attachment with father did not hold true with the attachment subscales of mother as source of support and paternal promotion of independence.

The interplay between the promotion of autonomy and source of support subscales is interesting. Whereas secure maternal promotion of autonomy positively correlated with secure paternal feelings of support, secure maternal feelings of support negatively correlated with paternal promotion of autonomy.

Within this college-age population, these findings suggest that mothers' responses to their child's transitions from childhood to adulthood may significantly impact not only their child, but also, their child's relationship with their fathers. When the mother-adolescent relationship is secure in the promotion of autonomy, the adolescent experiences his/her father as more emotionally supportive. However, the more adolescents perceive their mothers as sources of emotionally support, the less secure they appear to be with their fathers' promotion of autonomy. Maternal affective quality had a stronger impact on secure paternal promotion of autonomy than did maternal feelings of support, however, neither paternal promotion of autonomy nor maternal affective quality significantly influenced adolescent well-being. These findings provide some preliminary evidence suggesting that there may be distinct differences between how adolescents from divorced families are influenced by parental attachment styles postdivorce and their subsequent well-being.

In regards to the second major finding regarding parental attachment and adolescent well-being, within the Caucasian group, the prediction that secure attachments to both mother and father would be associated with higher levels of general, spiritual, and psychological well-being was not supported when the full-scale measures of attachment were analyzed. Only secure maternal attachment was significantly correlated with higher levels of general, spiritual, and psychological well-being. This finding was not consistent with previous studies that found large effects of adolescent-mother and adolescent-father relationships on adolescent well-being (Amato & Booth, 1996; Hojat, 1998; Whiteside &

Becker, 2000). When the parental attachment subscales were used in the analysis, adolescent well-being was enhanced by the perception of mothers as sources of emotional support, positive affective qualities of paternal relationships, and low levels of maternal conflict with father. These results support the hypothesis regarding parental attachment and conflict, but provide greater specificity than was theorized.

The third major finding of this study concerns the importance of ethnic identity and a response style of social desirability to parental attachment and adolescent well-being. The tendency to respond to self-report measures with a style of social desirability is well documented in the research (Reynolds, 1982) and was found to have a significant impact on the variables in this study. While this response style is found and controlled in numerous research studies, few researchers attempt to explain the relationship between a social desirability response style and their main variables. In this study, a response style of social desirability was found within both the African American and Hispanic group and the Caucasian group and was entered into the path analysis first in order to control for unwanted variance. The differences found between the groups in relation to social desirability were interesting. Within the Caucasian group, social desirability had a moderately strong impact on paternal feelings of affect and paternal feelings of support, but did not correlate with any of the maternal attachment subscales or impact adolescent well-being. Within the African American and Hispanic group, social desirability was impacted by maternal feelings of affect, maternal promotion of independence, and maternal conflict with father. Social desirability also had a moderately strong negative impact on adolescent well-being. These findings provide some preliminary evidence that suggest the tendency to respond in a socially desirable manner is associated with the parent-adolescent relationship, which may be indicative of adolescent well-being, and may differ among racial/ethnic groups. The results of the current study are consistent with Searle's (1998) finding that social desirability had a differential effect within attachment categories, but contradicted Seiffge's (2003) finding that securely attached persons reported less mental and physical symptoms but higher social desirability. The relationship between parental-child relationships and the willingness to present oneself in an unfavorable light warrants clarification through further research.

Ethnic identity was also found to co-vary with paternal attachment styles within the African American and Hispanic group and was thus included in the path analysis. The data indicated that maternal conflict toward father and perceived paternal feelings of affect positively influenced ethnic identity, while ethnic identity in turn positively influenced paternal feelings of support, paternal promotion of independence, and adolescent well-being. The moderately strong effects between ethnic identity and paternal feelings of affect and adolescent well-being suggest that ethnic identity might play a substantial role in mother-child, father-child, and mother-father relationships, as well as significantly impacting adolescent well-being. These findings suggest that ethnic identity should be considered whenever studying family process variables within racially/ethnically diverse samples.

The fourth major finding of this study concerns the differences in parental attachment and adolescent well-being found between the African American and Hispanic group and the Caucasian group. The findings of the current study did not support the hypothesis that no significant differences would be found differentiating Hispanic and African American adolescents' from Caucasian adolescents' parental attachment patterns. Several differences in the data have been illustrated thus far, but a few of the more significant include: 1) within the African American and Hispanic group, M/AFF, M/IND, P/IND, P/SUP, and P/AFF causally effect adolescent well-being, whereas only M/SUP and P/AFF causally effect adolescent well-being within the Caucasian group; 2) maternal conflict with father had a significant negative relation on adolescent well-being within the Caucasian group, but not within the African American and Hispanic group; 3) M/IND causally effect all three paternal attachment subscales within the African American and Hispanic group, but only effects P/SUP within the Caucasian group; 4) M/SUP had no relationship with P/AFF, P/IND, P/SUP, or WB within the African American and Hispanic group, yet M/SUP had a moderately strong negative impact on P/IND and a moderately strong positive impact on WB within the Caucasian group; 5) P/AFF had a negative impact on WB within the African American and Hispanic group, but a positive impact on WB within the Caucasian group; 6) ethnic identity was a significant variable within the African American and Hispanic group, but not within the Caucasian group; and 7) the model accounted for 79% of the variance within the African American and Hispanic group, but only 35% of the variance within the Caucasian group. These findings

suggest it would be ineffectual and unethical to attend to racially/ethnically diverse family systems and adolescents in the same manner as majority group family systems.

The findings from this study were consistent with prior research that found father-adolescent and father-young adult relationships to be significant predictors of young adult psychosocial well-being (Summers, Forehand, Armistead, & Tannerbaum, 1998; Whiteside & Becker, 2000). As one of the first studies to examine this relationship within the context of postdivorce parental attachment among African American, Hispanic, and Caucasian college students, this study extended the findings of other researchers who have examined the unique links between 1) divorce and adolescent well-being, 2) parental attachment and adolescent well-being, 3) parental conflict and adolescent well-being and 4) maternal and paternal attachment styles. Clearly, the results of this study do suggest that 1) mother-adolescent bonds and mother-father conflict have an impact on the father-adolescent bonds and 2) mother-adolescent and fatheradolescent bonds play an important role in the development of adolescent selfesteem. Clearly, differences exist in the postdivorce family process variables and parental relationships between the racial/ethnic groups. Efforts should be made to replicate this study to establish confidence in these findings and to clarify the robustness of these initial interpretations

#### Limitations

There are several limitations inherent in this study. To start with, combining the African American group and Hispanic group due to sample size

may limit the generalizability of the results. Future studies should include a more diverse sample that includes a larger number of participants of different races/ethnicities. Secondly, it is important to note that in the process of using path analysis, causal inferences were drawn from correlational data. The degree of confidence in the validity of causal inference from correlational data is typically much weaker than inference drawn from data resulting from a well-designed experimental study where the important concept of random assignment to treatments has been incorporated (Tate, 1998). In path analysis with correlational data there is no statistical test that will definitively indicate whether the specifications, or misspecifications, represent true causal effects.

In addition, research such as this that relies entirely on self-report measures of key constructs, and retrospective measure of variables, may be vulnerable to memory and\or distortions. While attention to diversity is apparent in the design, the study relied on a convenient sample from a large mid-western university identified largely as White. Therefore, appropriate caution should be exercised in generalizing the findings. Efforts were made to control recognized covariates, but there may be confounds such as personality characteristics or other relationship-specific factors.

Lastly, the developmental stage of the subjects in this study may have influenced the results. Psychoanalyst Erik Erikson has described the physical, emotional and psychological stages of development and related specific issues, or developmental work or *tasks*, to each stage. According to Erikson, the subjects in this study were at the stage of development that he called *Identity vs* 

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Role Confusion. Individuals at this stage of life are learning how to answer satisfactorily the question of "Who am I?" but even the most adjusted of adolescents experience some role identity confusion. Attempts are made to integrate many roles (e.g., child, sibling, student, athlete, worker) into a selfimage under role models and peer pressure. In later adolescence, the adolescent seeks leadership, and gradually develops a set of ideals. Erikson believes that, in our culture, adolescence do not yet have to "play for keeps," but can experiment, trying various roles, and thus hopefully find the one most suitable for them. This means that individuals at this age are negotiating their roles with their parents, their beliefs about life, and their ideas about who they are. The impact of this process could have directly or indirectly influenced the results in this study. According to Lewinsohn and Rosenbaum (1987), current emotional states may affect perceptions of the parent-child relationship. In this study, there was a statistically significant difference in the educational level of the two groups (p < .01). Nearly 50% of the African American and Hispanic group were freshman and 19% sophomores, whereas the Caucasian group was dispersed fairly evenly across the educational levels, with 25% within each of the four years. This study should be repeated with attention given to the educational level/age of the participants.

#### Relevance to Practice

Findings from this study serve to highlight the changing and diverse nature of parent-child relationships after divorce, as well as the complexity of family dynamics among African American, Hispanic, and Caucasian families. Appraisal

of the mother-adolescent, father-adolescent, and mother-father relationships serve as important predictors of multiple areas of adjustment for adolescents and young adults. Adolescent attachment to parents seems to have important implications for adolescent subjective well-being in a broad range of subscales. A significant implication of this study resides in the difference found between the African American and Hispanic group when compared to the Caucasian group. These distinctions indicate that the same modality of treatment cannot be used across racial and ethnic groups. We are once again reminded that, "one size does not fit all." Therapy needs to be sensitive to the physical and mental features of the divorce process, including loyalty dilemmas, loss, renewal, understanding of clients' divorce-related experiences, and the reengagement of adult children with their fathers within the cultural context of the individuals being served. Racially/ethnically sensitive interventions need to be identified to help parents handle conflict constructively, support and facilitate cooperative coparenting, and promote positive child attachment relationships with both parents. Clinicians working with adolescents from divorced families with mother-custody arrangements may want to select intervention strategies that help these adolescents examine and understand their emotional relationships with their fathers, perhaps aiding them in relinquishing a sense of responsibility for conflict while helping them to focus on their ability to take responsibility for the positive happenings in their lives. Findings of this study serve to emphasize specific avenues for interventions to enhance the mother-adolescent relationship and the

father-adolescent relationship in distressed divorced families within different racial/ethnic groups.

This study suggests that when working with Caucasian college students from divorced families there may be great benefit in assessing paternal relationships and parental conflict, past and present, and subsequent impact on students' well-being. If emotional support is missing from the student's relationship with his/her mother, the therapeutic relationship could serve as a model. This relationship and the establishment of a support system will help the student feel understood, build confidence and supply empowerment.

Compromised affective quality of the paternal relationship may manifest in a need to control, fear of closeness, and a lack of reciprocity in interpersonal relationships. The therapeutic challenge is to enhance the establishment of secure attachment patterns of trust, affection, intimacy, communication, and reciprocity. Students are assisted in learning to identify, manage, and express emotions in a constructive manner.

Alternatively, this study suggests that when working with African American or Hispanic students, compromised affective quality of maternal relationships may result in feelings of isolation, alienation, and disconnect. Treatment may be enhanced by focusing on establishing a sense of connection and belonging, as well as the formulation of identity. Students need to be assisted in exploring the environment with feelings of safety and security, which will then lead to healthy cognitive and social development. A lack of paternal facilitation of autonomy or affective support may challenge the basic qualities of trust, empathy,

cooperation, and reciprocity within relationships. The counselor can assist in the modification of negative relationship dynamics, which will enhance stability and support from inside and outside the family, and create a climate of hope, positivity, and closeness. Core beliefs about the maternal relationship are focused on in order to improve the paternal relationship and enable students to create and maintain emotionally reciprocal relationships and cultivate a positive and realistic sense of self and self-in-relation to the world.

Additionally, given 1) the increased concern for budgetary restrictions in institutions across the country, 2) the percentage of students actually graduating from college is declining (U.S. Department of Education, 1995), and 3) once at college, students are reporting record high levels of emotional and psychological stress (Sax, Astin, Korn, & Mahoney, 1999), the option of intervening with students experiencing difficulties via psychoeducational groups focusing on facilitating healthy attachment might be feasible and cost-efficient. Regardless of the mode of intervention, it is important that clinicians working with college students better understand the reasons why some students make it through college successfully while other students become increasing emotionally distressed, resulting in some students experiencing decreased school performance, misconduct, depression, and difficulties with interpersonal relationships. This research offers contributions in gaining understanding in this area, especially in meeting the needs of African American and Hispanic students.

#### Future Research

Efforts should be made to replicate this study to establish confidence in these findings and to clarify the robustness of these initial interpretations. Postdivorce family process variables within different racial and ethnic groups need further examination. Efforts should be made to use measures normed on diverse samples or to norm the current measures on African American and Hispanic samples. Future research may find it beneficial to explore the varying levels of noncustodial father contact, the different possible dynamics of the inresidence family composition on the out-of-residence relationship with father, and whether similar findings exist between custodial fathers and noncustodial mothers within and between different racial/ethnic groups. Future studies, perhaps with longitudinal designs, could also yield support for the causal inferences suggested in this study by further delineation of the unique effects of maternal and paternal attachment styles on additional dimensions of adolescent functioning postdivorce. Exploration of the role of ethnic identity in the parentchild and mother-father relationships in the realm of attachment theory could prove to be enlightening.

**APPENDICES** 

## APPENDIX A

# Forms and Demographic Information

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### **UCHRIS Approval**

IRB #04-208 / APP # i019504

Approved 3/20/2004. Renewal approved 2/21/05.

#### **Recruitment Script**

Good day, my name is Janet Kinney and I am a doctoral candidate in Counseling Psychology. I am here today to recruit volunteers to participate in my dissertation research project. Your (instructor) has allowed me to speak with you today about the study and offer an opportunity for those who are interested in participating to complete a survey.

The purpose of this study is to learn more about the factors that affect individuals from divorced families. Therefore, only undergraduates that experienced the divorce of their biological parents in childhood are eligible to participate. If you agree to participate in this study, you will be asked to complete paper and pencil surveys that are designed to measure your perceptions of your parents' attitudes towards you, your relationships with your parents, and your well being. Total time of participation is approximately 30-40 minutes. Participants will have the opportunity to enter a drawing in which they will be eligible to win one of three \$100 awards. Those wishing to enter the drawing will need to supply an email address on the consent form, along with their name. Since this study is focusing on factors that affect students from divorced families, there are some specific criteria that apply to participants. Potential subjects must be: a) 18-23 years old, b) single with no children, c) parents divorced prior to age 16, d) mother had primary custody, e) postdivorce contact with both parents, f) 8<sup>th</sup> grade reading level.

Your responses to the survey questions will be kept confidential. Furthermore, your name will not appear on any of the measures, and no one will have any way of associating your name with any of the measures. If you volunteer to participate, you are under no obligation to complete the questionnaire packet. In a moment I will be passing out the informed consent forms. If you would like to participate and you meet the study criteria, please take one. If you do not qualify or would just rather not participate, please do not take one. After we go over the informed consent form, I will answer questions and then distribute the survey packet. I thank you for your time.

Are there any questions right now?

#### INFORMED CONSENT FORM

Postdivorce Parental Relationships and Well-being Among African American, Hispanic, and Caucasian College Students

#### **Procedures**

If you agree to participate in this study, you will be asked to complete paper and pencil instruments that are designed to measure your perceptions of your parents' attitudes towards you, your relationships with your parents, and your well being. Total time of participation is approximately 30-40 minutes. All participants will have the opportunity to enter a drawing in which they will be eligible to win one of three \$100 awards. Those wishing to enter the drawing need to supply an email address on this consent form, along with their name. Consent forms will be randomly selected to determine the winners. Once all data is collected, winners will be asked via email and to supply an address where a check can be mailed. Potential subjects must be: a) 18-23 years old, b) single with no children, c) parents divorced prior to age 16, d) mother had primary custody, e) postdivorce contact with both parents, f) 8<sup>th</sup> grade reading level.

#### Risks/Discomforts

There are minimal risks involved in participating in the study. You might find that publicly stating you are from a divorced family is uncomfortable or you may find there are instrument questions that make you uncomfortable or upset. There are several ways to deal with uncomfortable feelings that may arise:

- a. Participation is strictly voluntary, so there is no pressure to participate.
- b. You may consider speaking with a counselor about your reactions (e.g., you could contact the MSU Counseling Center at 355-8270).
- c. You are free to decline to answer any questions you do not wish to answer or to stop your participation at any time.

#### Privacy and Confidentiality

Your privacy will be protected to the maximum extent permissible under the law. The following precautions will be taken to protect your confidentiality: a) no individual names or other identifying information will be used in any reports or publications that may result from this study, b) your name will not be on any of the surveys, and c) both the informed consent forms as well as the completed instruments will be kept in a locked cabinet and only the primary researcher will have access to these files.

### **Participation**

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at anytime without penalty and without loss of benefits to which you are otherwise entitled.

#### Contact

If you have questions at any time about the study or the procedures, you may contact the principle investigator, Janet M. Kinney, M.A, LLP, at <a href="mailto:imkinney3@aol.com">imkinney3@aol.com</a> or at 517-627-5490. If you have questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact — anonymously, if you wish — Dr. Peter Vasilenko, Chair of the University Committee on Research Involving Human Subjects (UCRIHS) by phone: (517) 355-2180, fax: (517) 432-4503, e-mail: ucrihs@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48824."

#### Consent

I voluntarily agree to participate in this study. Please give the signed form to the interviewer and keep the other copy of the consent form for your records.

Participant's name (print)	_
Participant's signature	
Email address	
Date	

 Table A1 Caucasian Group Descriptive Statistics for Demographic Information

	N	Min	Max	Mean	Std. Deviation
Age	93	18.00	24.00	19.9677	1.30594
Education Level	93	1.00	5.00	2.4624	1.17547
Age at time of separation	68	1.00	16.00	8.1029	4.82264
Age at time of divorce	93	.00	16.00	7.9247	5.00920
Length of parents committed relationship to each other in years	93	2.00	26.00	11.6989	5.47878
Number of siblings with same parents	93	.00	4.00	1.1183	.84506
Frequency of contact with mother currently	93	1.00	4.00	1.5484	.71500
Frequency of contact with mother prior to age 18	93	1.00	5.00	1.0860	.58339
Frequency of contact with father currently	93	1.00	4.00	2.2903	.89176
Frequency of contact with father prior to age 18	93	1.00	4.00	2.0430	.87121
mother's educational level	93	1.00	5.00	2.9785	1.04235
father's educational level	93	1.00	5.00	3.1828	1.12236

**Table A2** Caucasian Group Descriptive Statistics for Subscales and Full-scale Parental Attachment Measures.

	N	Min	Max	Mean	Std. Dev.
Maternal Attachment Total	93	95.00	245.00	205.0753	33.38420
Maternal feelings of affect	93	37.00	119.00	99.4516	18.28489
Maternal promotion of independence	93	37.00	80.00	65.5806	10.69978
Mother feelings of support	93	23.00	70.00	56.4516	11.67636
Paternal Attachment Total	93	90.00	246.00	184.3656	40.87435
Paternal affective quality of Relationship	93	38.00	119.00	87.9677	23.65488
Paternal promotion of independence	93	36.00	81.00	64.5699	10.31820
Father feelings of support	93	18.00	68.00	46.1398	14.80716

**Table A3** African American and Hispanic Group Descriptive Statistics for Demographic Information

Demographic inform	N	Min	Max	Mean	Std. Dev.
Age	86	18.00	23.00	19.6512	1.31746
Education Level	86	1.00	5.00	1.9535	1.06171
Age at time of separation	54	1.00	16.00	6.2778	3.84814
Age at time of divorce	86	1.00	16.00	6.4651	3.75013
Length of parents committed relationship to each other in years	82	2.00	28.00	9.3415	5.03621
Number of siblings with same parents	85	.00	4.00	1.2941	.99790
Frequency of contact with mother currently	86	1.00	4.00	1.5581	.67918
Frequency of contact with mother prior to age 18	86	1.00	3.00	1.1163	.41780
Frequency of contact with father currently	86	1.00	5.00	2.7907	.99548
Frequency of contact with father prior to age 18	86	1.00	4.00	2.6279	1.04089
Mother's educational level	86	1.00	5.00	2.9419	.89908
Father's educational level	86	1.00	5.00	2.7558	1.20719

**Table A4** African American and Hispanic Group Descriptive Statistics for Subscales and Full-scale Parental Attachment Measures.

	N	Min	Max	Mean	Std. Dev.
Maternal Attachment Tot	86	123.00	255.00	196.1744	31.21168
Maternal feelings of affect	86	55.00	118.00	95.2093	16.04194
Maternal promotion of independence	86	40.00	87.00	63.3721	11.65287
Mother feelings of support	86	25.00	70.00	52.8605	12.01290
Paternal Attachment Tot	86	78.00	229.00	169.1395	39.04813
Paternal affective quality of relationship	86	40.00	115.00	80.2326	20.80423
Paternal promotion of independence	86	22.00	78.00	61.0116	14.15003
Father feelings of support	86	18.00	66.00	41.1744	13.91334

Table A5 Cronbach's Alpha

Cronbach's Alpha	N of Items
.896	20
.941	16
.844	13
.901	12
.928	36
.928	34
.948	52
.957	52
	.896 .941 .844 .901 .928 .928

## **APPENDIX B**

# African American and Hispanic Group Path Analysis 1

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# Figure B1 African American and Hispanic Group Stepwise Multiple Regression for Path Analysis 1

# B.1.1 Step 1: Well-being regressed on ethnic identity and social desirability, then maternal attachment, maternal conflict with father, and paternal attachment.

**Model Summary** 

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.644ª	.415	.408	2.06080
2	.788 <sup>b</sup>	.621	.612	1.66894
3	.835 <sup>c</sup>	.697	.686	1.50009
4	.870 <sup>d</sup>	.756	.744	1.35385
5	.883 <sup>e</sup>	.780	.767	1.29391

- a. Predictors: (Constant), Maternal Attachment Total
- b. Predictors: (Constant), Maternal Attachment Total, eth\_ mean
- C. Predictors: (Constant), Maternal Attachment Total, eth\_mean, Social Desirability Scale Mean
- d. Predictors: (Constant), Maternal Attachment Total, eth\_ mean, Social Desirability Scale Mean, Paternal Attachment Total
- e. Predictors: (Constant), Maternal Attachment Total, eth\_ mean, Social Desirability Scale Mean, Paternal Attachment Total, Schwarz inter-parental conflict scale total

#### ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	252.979	1	252.979	59.568	.000ª
ł	Residual	356.740	84	4.247		
	Total	609.719	85			
2	Regression	378.535	2	189.267	67.951	.000b
	Residual	231.184	83	2.785		
	Total	609.719	85			
3	Regression	425.196	3	141.732	62.984	.000 <sup>c</sup>
İ	Residual	184.523	82	2.250		
ŧ	Total	609.719	85			
4	Regression	461.252	4	115.313	62.912	.000 <sup>d</sup>
	Residual	148.467	81	1.833		
	Total	609.719	85			i
5	Regression	475.782	5	95.156	56.836	.000e
	Residual	133.937	80	1.674	!	
	Total	609.719	85			

- a. Predictors: (Constant), Maternal Attachment Total
- b. Predictors: (Constant), Maternal Attachment Total, eth\_mean
- C. Predictors: (Constant), Maternal Attachment Total, eth\_mean, Social Desirability Scale Mean
- d. Predictors: (Constant), Maternal Attachment Total, eth\_mean, Social Desirability Scale Mean, Paternal Attachment Total
- e. Predictors: (Constant), Maternal Attachment Total, eth\_mean, Social Desirability Scale Mean, Paternal Attachment Total, Schwarz inter-parental conflict scale total
- f. Dependent Variable: sse\_total

Coefficients

			lardized cients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	2.247	1.422		1.580	.118
	Maternal Attachment Tota	.055	.007	.644	7.718	.000
2	(Constant)	-5.696	1.651		-3.449	.001
	Maternal Attachment Tota	.053	.006	.620	9.153	.000
	eth_mean	2.552	.380	.454	6.714	.000
3	(Constant)	-1.000	1.807		553	.582
	Maternal Attachment Tota	.042	.006	.486	7.203	.000
	eth_mean	2.501	.342	.445	7.316	.000
	Social Desirability Scale Mean	-3.406	.748	307	-4.554	.000
4	(Constant)	-1.282	1.632		785	.435
	Maternal Attachment Tota	.035	.005	.403	6.315	.000
	eth_mean	2.027	.327	.361	6.209	.000
	Social Desirability Scale Mean	-3.307	.675	298	-4.895	.000
	Paternal Attachment Total	.019	.004	.274	4.435	.000
5	(Constant)	-1.642	1.565		-1.049	.297
	Maternal Attachment Tota	.035	.005	.407	6.675	.000
	eth_mean	1.797	.322	.320	5.584	.000
	Social Desirability Scale Mean	-3.672	.657	331	-5.585	.000
	Paternal Attachment Total	.022	.004	.318	5.224	.000
	Schwarz inter-parental conflict scale total	.013	.004	.167	2.946	.004

a. Dependent Variable: sse\_total

**Excluded Variables** 

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1	Schwarz inter-parental conflict scale total	.110 <sup>a</sup>	1.296	.199	.141	.965
	Social Desirability Scale Mean	324 <sup>a</sup>	-3.753	.000	381	.811
	eth_mean	.454 <sup>a</sup>	6.714	.000	.593	.997
}	Paternal Attachment Tota	.411 <sup>a</sup>	5.347	.000	.506	.887
2	Schwarz inter-parental conflict scale total	.036 <sup>b</sup>	.520	.605	.057	.940
	Social Desirability Scale Mean	307 <sup>b</sup>	-4.554	.000	449	.810
	Paternal Attachment Tota	.284 <sup>b</sup>	4.066	.000	.410	.791
3	Schwarz inter-parental conflict scale total	.094 <sup>c</sup>	1.487	.141	.163	.906
	Paternal Attachment Tota	.274 <sup>c</sup>	4.435	.000	.442	.790
4	Schwarz inter-parental conflict scale total	.167 <sup>d</sup>	2.946	.004	.313	.851

a. Predictors in the Model: (Constant), Maternal Attachment Total

# B.1.2 Step 2: Paternal attachment regressed on ethnic identity and social desirability, then maternal attachment and maternal conflict with father.

**Model Summary** 

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.336ª	.113	.103	36.99038
2	.457 <sup>b</sup>	.209	.190	35.15191
3	.507 <sup>c</sup>	.257	.230	34.25979

a. Predictors: (Constant), Maternal Attachment Total

b. Predictors in the Model: (Constant), Maternal Attachment Total, eth\_mean

C. Predictors in the Model: (Constant), Maternal Attachment Total, eth\_mean, Social Desirability S Mean

d. Predictors in the Model: (Constant), Maternal Attachment Total, eth\_mean, Social Desirability S Mean, Paternal Attachment Total

e. Dependent Variable: sse\_total

b. Predictors: (Constant), Maternal Attachment Total, eth\_mean

c. Predictors: (Constant), Maternal Attachment Total, eth\_ mean, Schwarz inter-parental conflict scale total

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14668.133	1	14668.133	10.720	.002ª
	Residual	114936.2	84	1368.288		
	Total	129604.3	85			
2	Regression	27044.816	2	13522.408	10.943	.000b
	Residual	102559.5	83	1235.657		
1	Total	129604.3	85		•	
3	Regression	33358.196	3	11119.399	9.474	.000 <sup>c</sup>
	Residual	96246.130	82	1173.733		
	Total	129604.3	85			

a. Predictors: (Constant), Maternal Attachment Total

b. Predictors: (Constant), Maternal Attachment Total, eth\_mean

C. Predictors: (Constant), Maternal Attachment Total, eth\_mean, Schwarz inter-parental conflict scale total

d. Dependent Variable: Paternal Attachment Total

#### Coefficients

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	86.573	25.531		3.391	.001
	Maternal Attachment Tota	.421	.129	.336	3.274	.002
2	(Constant)	7.710	34.779		.222	.825
	Maternal Attachment Tota	.400	.122	.320	3.269	.002
	eth_mean	25.340	8.007	.309	3.165	.002
3	(Constant)	24.368	34.649		.703	.484
	Maternal Attachment Total	.344	.122	.275	2.832	.006
	eth_mean	28.284	7.906	.345	3.577	.001
	Schwarz inter-parental conflict scale total	252	.109	228	-2.319	.023

a. Dependent Variable: Paternal Attachment Total

**Excluded Variables** 

					Partial	Collinearity Statistics
Model	_	Beta In	t	Sig.	Correlation	Tolerance
1	Schwarz inter-parental conflict scale total	171 <sup>a</sup>	-1.654	.102	179	.965
	Social Desirability Scale Mean	044 <sup>8</sup>	384	.702	042	.811
	eth_mean	.309ª	3.165	.002	.328	.997
2	Schwarz inter-parental conflict scale total	228 <sup>b</sup>	-2.319	.023	248	.940
	Social Desirability Scale Mean	033 <sup>b</sup>	301	.764	033	.810
3	Social Desirability Scale Mean	.014 <sup>c</sup>	.133	.895	.015	.780

- a. Predictors in the Model: (Constant), Maternal Attachment Total
- b. Predictors in the Model: (Constant), Maternal Attachment Total, eth\_mean
- C. Predictors in the Model: (Constant), Maternal Attachment Total, eth\_mean, Schwarz inter-parer conflict scale total
- d. Dependent Variable: Paternal Attachment Total

## B.1.3 Step 3: Paternal attachment regressed on ethnic identity, then maternal attachment and maternal conflict with father.

**Model Summary** 

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.336ª	.113	.103	36.99038
2	.457 <sup>b</sup>	.209	.190	35.15191
3	.507 <sup>c</sup>	.257	.230	34.25979

- a. Predictors: (Constant), Maternal Attachment Total
- Predictors: (Constant), Maternal Attachment Total, eth\_ mean
- c. Predictors: (Constant), Maternal Attachment Total, eth\_ mean, Schwarz inter-parental conflict scale total

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14668.133	1	14668.133	10.720	.002ª
ł	Residual	114936.2	84	1368.288		
	Total	129604.3	85			
2	Regression	27044.816	2	13522.408	10.943	.000 <sup>b</sup>
	Residual	102559.5	83	1235.657		
	Total	129604.3	85			
3	Regression	33358.196	3	11119.399	9.474	.000°
	Residual	96246.130	82	1173.733		
	Total	129604.3	85			

- a. Predictors: (Constant), Maternal Attachment Total
- b. Predictors: (Constant), Maternal Attachment Total, eth\_mean
- C. Predictors: (Constant), Maternal Attachment Total, eth\_mean, Schwarz inter-parental conflict scale total
- d. Dependent Variable: Paternal Attachment Total

#### Coefficients

			dardized icients	Standardized Coefficients		
Model	[	В	Std. Error	Beta	t	Sig.
1	(Constant)	86.573	25.531		3.391	.001
	Matemal Attachment Tota	.421	.129	.336	3.274	.002
2	(Constant)	7.710	34.779		.222	.825
	Maternal Attachment Tota	.400	.122	.320	3.269	.002
	eth_mean	25.340	8.007	.309	3.165	.002
3	(Constant)	24.368	34.649		.703	.484
	Maternal Attachment Tota	.344	.122	.275	2.832	.006
	eth_mean	28.284	7.906	.345	3.577	.001
	Schwarz inter-parental conflict scale total	252	.109	228	-2.319	.023

a. Dependent Variable: Paternal Attachment Total

Model		B <b>et</b> a In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1	Schwarz inter-parental conflict scale total	171 <sup>a</sup>	-1.654	.102	179	.965
	eth_mean	.309ª	3.165	.002	.328	.997
2	Schwarz inter-parental conflict scale total	228 <sup>b</sup>	-2.319	.023	248	.940

- a. Predictors in the Model: (Constant), Maternal Attachment Total
- b. Predictors in the Model: (Constant), Maternal Attachment Total, eth\_mean
- C. Dependent Variable: Paternal Attachment Total

# B.1.4 Step 4: Ethnic identity regressed on maternal attachment, maternal conflict with father and paternal attachment.

#### **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.327ª	.107	.096	.45339

a. Predictors: (Constant), Paternal Attachment Total

#### **ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.064	1	2.064	10.041	.002ª
1	Residual	17.267	84	.206		
	Total	19.331	85			

a. Predictors: (Constant), Paternal Attachment Total

b. Dependent Variable: eth\_mean

#### Coefficients

			dardized icients	Standardized Coefficients		
Mode	el .	В	Std. Error	Beta	t	Sig.
1	(Constant)	2.599	.219		11.893	.000
	Paternal Attachment Tota	.004	.001	.327	3.169	.002

a. Dependent Variable: eth\_mean

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1	Schwarz inter-parental conflict scale total	.234 <sup>a</sup>	2.264	.026	.241	.948
	Maternal Attachment Total	063ª	573	.568	063	.887

a. Predictors in the Model: (Constant), Paternal Attachment Total

# B.1.5 Step 5: Social desirability regressed on maternal attachment, paternal attachment, and maternal conflict with father.

#### **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.435ª	.189	.180	.21892

a. Predictors: (Constant), Maternal Attachment Total

#### **ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.940	1	.940	19.624	.000ª
1	Residual	4.026	84	.048		
	Total	4.966	85			

a. Predictors: (Constant), Maternal Attachment Total

#### Coefficients

		Unstandardized Coefficients		Standardized Coefficients			
Model		В	Std. Error	Beta	t	Sig.	
1	(Constant)	1.332	.151		8.815	.000	
	Maternal Attachment Tota	003	.001	435	-4.430	.000	

a. Dependent Variable: Social Desirability Scale Mean

b. Dependent Variable: eth\_mean

b. Dependent Variable: Social Desirability Scale Mean

					Partial	Collinearity Statistics
Model		Beta In	t	Sig.	Correlation	Tolerance
1	Paternal Attachment Tota	040 <sup>a</sup>	384	.702	042	.887
	Schwarz inter-parental conflict scale total	.168 <sup>a</sup>	1.694	.094	.183	.965

a. Predictors in the Model: (Constant), Maternal Attachment Total

# B.1.6 Step 6: Maternal conflict with father regressed on ethnic identity and social desirability first, then maternal attachment and paternal attachment.

#### **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.228ª	.052	.041	34.58256

a. Predictors: (Constant), Paternal Attachment Total

#### **ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5511.622	1	5511.622	4.609	.035ª
	Residual	100460.1	84	1195.954		
	Total	105971.7	85			

a. Predictors: (Constant), Paternal Attachment Total

#### Coefficients<sup>a</sup>

		Unstandardized Coefficients		Standardized Coefficients			
Mode	1	В	Std. Error	Beta	t	Sig.	
1	(Constant)	96.043	16.670		5.761	.000	
	Paternal Attachment Total	206	.096	228	-2.147	.035	

a. Dependent Variable: Schwarz inter-parental conflict scale total

b. Dependent Variable: Social Desirability Scale Mean

b. Dependent Variable: Schwarz inter-parental conflict scale total

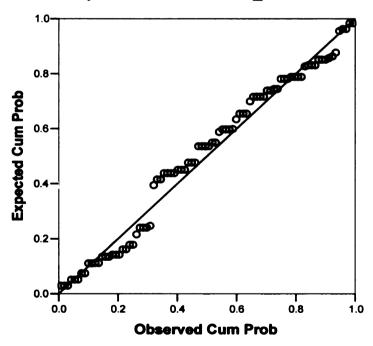
Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1	eth_mean	.248ª	2.264	.026	.241	.893
	Maternal Attachment Total	124ª	-1.100	.275	120	.887

a. Predictors in the Model: (Constant), Paternal Attachment Total

Figure B2 African American and Hispanic group Normal Probability Plot of the Regression Standardized Residuals for Path Analysis 1

### Normal P-P Plot of Regression Standardized Residual

### Dependent Variable: sse\_total

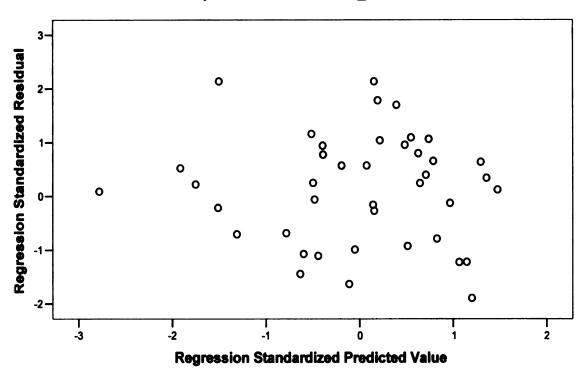


b. Dependent Variable: Schwarz inter-parental conflict scale total

**Figure B3** African American and Hispanic Residuals Scatter plot for Path Analysis 1

## **Scatterplot**

## Dependent Variable: sse\_total



**Table B** African American and Hispanic Group Path 1 Decompositions and Calculations of Reproduced Correlations

Reproduced r's	Path	Decompositions I	
r <sub>13</sub>	=	P <sub>31</sub> (435) (D)	=435
r <sub>14</sub>	=	P 41 (.336) (D)	= .336
r <sub>15</sub>	=	P <sub>41</sub> P <sub>45</sub> (.336)(.327) (1)	= .109
<i>r</i> <sub>16</sub>	= =	$\begin{array}{lll} p_{61} + p_{41}p_{64} + & p_{41}p_{54}p_{65} + p_{31}p_{63} \\ (.407) + (.336)(.318) + (.336)(.327)(.320) + (435)(331) \\ (D) & (I) & (I) & (I) \end{array}$	= .693
r <sub>24</sub>	=	P <sub>42</sub> (228) (D)	=228
「 <sub>25</sub>	=	P <sub>42</sub> P <sub>54</sub> (228) (.327) (1)	=075
r <sub>26</sub>	=	P <sub>42</sub> P <sub>64</sub> + P <sub>42</sub> P <sub>54</sub> P <sub>65</sub> (228)(.318) + (228)(.327)(.320) (1) (1)	=096
ſ34	=	P <sub>31</sub> P <sub>41</sub> (435)(.336) (S)	=146
r <sub>35</sub>	=	P <sub>31</sub> P <sub>41</sub> P <sub>45</sub> (435)(.336)(.327) (S)	=048
<i>Г</i> <sub>36</sub>	= =	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	=393
r <sub>45</sub>	=	P <sub>54</sub> (.327) (D)	= .327
r <sub>46</sub>	= =	$p_{64}$ + $p_{54}p_{65}$ + $p_{41}p_{31}p_{63}$ + $(.318)$ + $(.327)(.320)$ + $(.336)(435)(331)$ + $(.336)(.407)$ (S)	P <sub>41</sub> P <sub>61</sub> = .608
r <sub>56</sub>	=	P <sub>65</sub> + P <sub>54</sub> P <sub>64</sub> (.320) + (.327) (.318) (D) (S)	= .424

### APPENDIX C

## Caucasian Group Path Analysis 1

Figure C1	Caucasian Group Stepwise Multiple Regression for Path Analysis 1	135
Figure C2	Caucasian group Normal Probability Plot of the Regression Standardized Residuals for Path Analysis 1	140
Figure C3	Caucasian Group Residuals Scatter plot for Path Analysis 1	141

### Figure C1 Caucasian Group Stepwise Multiple Regression for Path Analysis 1

C.1.1 Step 1: Well-being regressed on social desirability, then maternal attachment, maternal conflict toward father and paternal attachment.

**Model Summary** 

	R			
Model	group = Caucasian (Selected)	R Square	Adjusted R Square	Std. Error of the Estimate
1	.399 <sup>a</sup>	.160	.150	1.94619
2	.539 <sup>b</sup>	.290	.274	1.79837

a. Predictors: (Constant), Maternal Attachment Total

b. Predictors: (Constant), Maternal Attachment Total, Schwarz inter-parental conflict scale total

ANOVA<sup>c,d</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	65.437	1	65.437	17.276	.000ª
	Residual	344.675	91	3.788		
	Total	410.112	92			
2	Regression	119.040	2	59.520	18.404	.000b
	Residual	291.073	90	3.234		
	Total	410.112	92			

a. Predictors: (Constant), Maternal Attachment Total

b. Predictors: (Constant), Maternal Attachment Total, Schwarz inter-parental conflict scale total

c. Dependent Variable: sse\_total

d. Selecting only cases for which group = Caucasian

Coefficients,b

			dardized icients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	8.195	1.263		6.490	.000
İ	Maternal Attachment Total	.025	.006	.399	4.156	.000
2	(Constant)	9.348	1.201		7.786	.000
l	Maternal Attachment Total	.024	.006	.385	4.330	.000
	Schwarz inter-parental conflict scale total	020	.005	362	-4.071	.000

a. Dependent Variable: sse\_total

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1	Social Desirability Scale Mean	089 <sup>a</sup>	922	.359	097	.999
	Schwarz inter-parental conflict scale total	362 <sup>a</sup>	-4.071	.000	394	.998
	Paternal Attachment Tota	.272 <sup>a</sup>	2.861	.005	.289	.946
2	Social Desirability Scale Mean	116 <sup>b</sup>	-1.304	.195	137	.993
	Patemal Attachment Tota	.173 <sup>b</sup>	1.820	.072	.189	.853

a. Predictors in the Model: (Constant), Maternal Attachment Total

## C.1.2 Step 2: Well-being regressed on maternal attachment and maternal conflict.

**Model Summary** 

	R			
Model	group = Caucasian (Selected)	R Square	Adjusted R Square	Std. Error of the Estimate
1	.399ª	.160	.150	1.94619
2	.539 <sup>b</sup>	.290	.274	1.79837

a. Predictors: (Constant), Maternal Attachment Total

b. Selecting only cases for which group = Caucasian

b. Predictors in the Model: (Constant), Maternal Attachment Total, Schwarz inter-parental conflict : total

c. Dependent Variable: sse\_total

b. Predictors: (Constant), Maternal Attachment Total, Schwarz inter-parental conflict scale total

ANOVAC,d

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	65.437	1	65.437	17.276	.000ª
	Residual	344.675	91	3.788		
	Total	410.112	92			
2	Regression	119.040	2	59.520	18.404	.000 <sup>b</sup>
	Residual	291.073	90	3.234		
	Total	410.112	92			

- a. Predictors: (Constant), Maternal Attachment Total
- b. Predictors: (Constant), Maternal Attachment Total, Schwarz inter-parental conflict scale total
- c. Dependent Variable: sse\_total
- d. Selecting only cases for which group = Caucasian

#### Coefficients, b

Model		Unstandardized Coefficients		Standardized Coefficients	-	
		В	Std. Error	Beta	t	Sig.
1	(Constant)	8.195	1.263		6.490	.000
	Maternal Attachment Tota	.025	.006	.399	4.156	.000
2	(Constant)	9.348	1.201		7.786	.000
	Maternal Attachment Tota	.024	.006	.385	4.330	.000
	Schwarz inter-parental conflict scale total	020	.005	362	-4.071	.000

- a. Dependent Variable: sse\_total
- b. Selecting only cases for which group = Caucasian

#### Excluded Variables

					Partial	Collinearity Statistics
Model		Beta In	t	Sig.	Correlation	Tolerance
1	Schwarz inter-parental conflict scale total	362 <sup>a</sup>	-4.071	.000	394	.998
	Paternal Attachment Tota	.272ª	2.861	.005	.289	.946
	Social Desirability Scale Mean	089 <sup>a</sup>	922	.359	097	.999
2	Paternal Attachment Tota	.173 <sup>b</sup>	1.820	.072	.189	.853
	Social Desirability Scale Mean	116 <sup>b</sup>	-1.304	.195	137	.993

- a. Predictors in the Model: (Constant), Maternal Attachment Total
- b. Predictors in the Model: (Constant), Maternal Attachment Total, Schwarz inter-parental conflict: total
- C. Dependent Variable: sse\_total

## C.1.3 Step 3: Paternal attachment regressed on social desirability, then maternal attachment and maternal conflict with father.

**Model Summary** 

	R			
Model	group = Caucasian (Selected)	R Square	Adjusted R Square	Std. Error of the Estimate
1	.314 <sup>a</sup>	.098	.088	39.02581
2	.454 <sup>b</sup>	.206	.189	36.81704
3	.510 <sup>c</sup>	.260	.235	35.75526

- a. Predictors: (Constant), Schwarz inter-parental conflict scale total
- b. Predictors: (Constant), Schwarz inter-parental conflict scale total, Social Desirability Scale Mean
- c. Predictors: (Constant), Schwarz inter-parental conflict scale total, Social Desirability Scale Mean, Maternal Attachment Total

ANOVA<sup>d,e</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15111.341	1	15111.341	9.922	.002ª
	Residual	138594.2	91	1523.014		
	Total	153705.6	92			
2	Regression	31711.042	2	15855.521	11.697	. <b>000</b> b
	Residual	121994.5	90	1355.495		
	Total	153705.6	92			
3	Regression	39924.511	3	13308.170	10.410	.000°
	Residual	113781.1	89	1278.439		
	Total	153705.6	92			

- a. Predictors: (Constant), Schwarz inter-parental conflict scale total
- Predictors: (Constant), Schwarz inter-parental conflict scale total, Social Desirability Scale Mean
- C. Predictors: (Constant), Schwarz inter-parental conflict scale total, Social Desirability Scale Mean, Maternal Attachment Total
- d. Dependent Variable: Paternal Attachment Total
- e. Selecting only cases for which group = Caucasian

Coefficients<sup>a,b</sup>

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	200.535	6.537		30.679	.000
	Schwarz inter-parental conflict scale total	333	.106	314	-3.150	.002
2	(Constant)	226.981	9.754		23.271	.000
	Schwarz inter-parental conflict scale total	359	.100	338	-3.590	.001
	Social Desirability Scale Mean	-31.003	8.859	330	-3.499	.001
3	(Constant)	169.017	24.753		6.828	.000
	Schwarz inter-parental conflict scale total	350	.097	329	-3.598	.001
	Social Desirability Scale Mean	-31.755	8.609	338	-3.689	.000
	Maternal Attachment Total	.283	.112	.231	2.535	.013

a. Dependent Variable: Paternal Attachment Total

**Excluded Variables** 

					Partial	Collinearity Statistics
Model		Beta In	t	Sig.	Correlation	Tolerance
1	Maternal Attachment Tota	.220ª	2.256	.026	.231	.998
	Social Desirability Scale Mean	330 <sup>a</sup>	-3.499	.001	346	.994
2	Maternal Attachment Tota	.231 <sup>b</sup>	2.535	.013	.259	.997

a. Predictors in the Model: (Constant), Schwarz inter-parental conflict scale total

C.1.4 Step 4: Maternal conflict regressed on maternal conflict with father and social desirability.

No relationship found.

C.1.5 Step 5: Social desirability regressed on maternal attachment and maternal conflict with father.

No relationship found.

b. Selecting only cases for which group = Caucasian

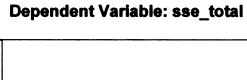
b. Predictors in the Model: (Constant), Schwarz inter-parental conflict scale total, Social Desirabilit Scale Mean

C. Dependent Variable: Paternal Attachment Total

**Figure C2** Caucasian group Normal Probability Plot of the Regression Standardized

Residuals for Path Analysis 1

### Normal P-P Plot of Regression Standardized Residual



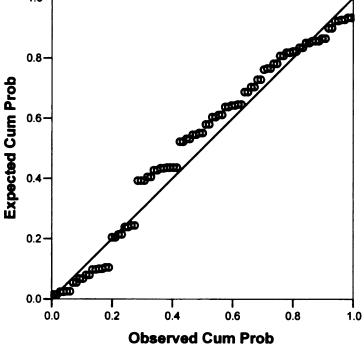
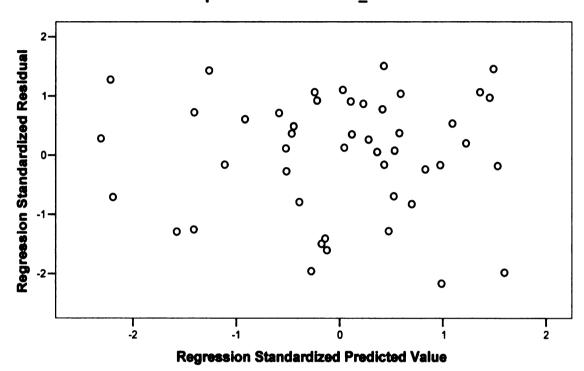


Figure C3 Caucasian Group Residuals Scatter plot for Path Analysis 1

## Scatterplot

### Dependent Variable: sse\_total



## APPENDIX D

## Caucasian Group Path Analysis 2

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### Figure D1 Caucasian Group Stepwise Multiple Regression for Path Analysis 2

D.1.1 Step 1: Well-being was regressed on social desirability, then on maternal affective quality of relationship, maternal promotion of independence, mother as source of support, maternal conflict with father, paternal feelings of affect, father promotion of independence, and father feelings of support.

#### **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.377ª	.142	.133	1.96596
2	. <b>553</b> b	.306	.290	1.77892
3	.593 <sup>c</sup>	.352	.330	1.72800

- a. Predictors: (Constant), Schwarz inter-parental conflict scale total
- b. Predictors: (Constant), Schwarz inter-parental conflict scale total, mother as source of support
- c. Predictors: (Constant), Schwarz inter-parental conflict scale total, mother as source of support, paternal affective quality of relationahip

#### **ANOVA**

Model	-	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	58.398	1	58.398	15.110	.000ª
ļ	Residual	351.714	91	3.865		
	Total	410.112	92			
2	Regression	125.302	2	62.651	19.798	.000b
	Residual	284.810	90	3.165		
ŀ	Total	410.112	92			
3	Regression	144.360	3	48.120	16.115	.000 <sup>c</sup>
	Residual	265.753	89	2.986		
	Total	410.112	92			

- a. Predictors: (Constant), Schwarz inter-parental conflict scale total
- b. Predictors: (Constant), Schwarz inter-parental conflict scale total, mother as source of support
- C. Predictors: (Constant), Schwarz inter-parental conflict scale total, mother as source of support, paternal affective quality of relationahip
- d. Dependent Variable: sse\_total

Coefficients

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	14.381	.329		43.674	.000
	Schwarz inter-parental conflict scale total	021	.005	377	-3.887	.000
2	(Constant)	10.323	.932		11.082	.000
	Schwarz inter-parental conflict scale total	022	.005	405	-4.603	.000
	mother as source of support	.073	.016	.405	4.598	.000
3	(Constant)	8.702	1.109		7.845	.000
	Schwarz inter-parental conflict scale total	019	.005	350	-3.968	.000
	mother as source of support	.068	.016	.377	4.374	.000
	paternal affective quality of relationahip	.020	.008	.224	2.526	.013

a. Dependent Variable: sse\_total

					Partial	Collinearity Statistics
Model		Beta In	t	Sig.	Correlation	Tolerance
1	Social Desirability Scale Mean	102 <sup>a</sup>	-1.052	.296	110	.994
	Matternal affective quality of relationship	.343 <sup>a</sup>	3.777	.000	.370	1.000
	mother as facilitator of independence	.315 <sup>a</sup>	3.359	.001	.334	.962
	mother as source of support	.405 <sup>a</sup>	4.598	.000	.436	.995
	paternal affective quality of relationahip	.273 <sup>a</sup>	2.835	.006	.286	.944
	father as facilitator of independence	.156 <sup>a</sup>	1.497	.138	.156	.858
	father as source of support	.242 <sup>a</sup>	2.449	.016	.250	.913
2	Social Desirability Scale Mean	131 <sup>b</sup>	-1.495	.138	157	.990
	Matternal affective quality of relationship	080 <sup>b</sup>	413	.681	044	.209
	mother as facilitator of independence	.128 <sup>b</sup>	1.199	.234	.126	.674
	patemal affective quality of relationahip	. <b>224</b> <sup>b</sup>	2.526	.013	.259	.928
	father as facilitator of independence	. <b>077</b> <sup>b</sup>	.798	.427	.084	.828
	father as source of support	.174 <sup>b</sup>	1.888	.062	.196	.885
3	Social Desirability Scale Mean	060 <sup>c</sup>	644	.521	068	.856
	Matternal affective quality of relationship	191 <sup>c</sup>	-1.000	.320	106	.199
	mother as facilitator of independence	.106 <sup>c</sup>	1.015	.313	.108	.669
	father as facilitator of independence	205 <sup>c</sup>	-1.507	.135	159	.386
	father as source of support	034 <sup>c</sup>	218	.828	023	.305

a. Predictors in the Model: (Constant), Schwarz inter-parental conflict scale total

b. Predictors in the Model: (Constant), Schwarz inter-parental conflict scale total, mother as sourc of support

c. Predictors in the Model: (Constant), Schwarz inter-parental conflict scale total, mother as source of support, paternal affective quality of relationship

d. Dependent Variable: sse\_total

D.1.2 Step 2: Paternal feelings of affect was regressed on social desirability, then on maternal feelings of affect, maternal promotion of independence, mother feelings of support, and maternal conflict with father.

#### **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.326ª	.106	.096	22.48567
2	.419 <sup>b</sup>	.175	.157	21.72001
3	.466 <sup>c</sup>	.217	.191	21.28091

- a. Predictors: (Constant), Social Desirability Scale Mean
- b. Predictors: (Constant), Social Desirability Scale Mean, Schwarz inter-parental conflict scale total
- c. Predictors: (Constant), Social Desirability Scale Mean, Schwarz inter-parental conflict scale total, Matternal affective quality of relationship

#### ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5468.836	1	5468.836	10.816	.001 <sup>a</sup>
	Residual	46010.068	91	505.605		
	Total	51478.903	92			
2	Regression	9020.604	2	4510.302	9.561	.000 <sup>b</sup>
	Residual	42458.299	90	471.759		
	Total	51478.903	92			
3	Regression	11172.840	3	3724.280	8.224	.000°
	Residual	40306.064	89	452.877		
	Total	51478.903	92			

- a. Predictors: (Constant), Social Desirability Scale Mean
- b. Predictors: (Constant), Social Desirability Scale Mean, Schwarz inter-parental conflict scale total
- C. Predictors: (Constant), Social Desirability Scale Mean, Schwarz inter-parental conflict scale total, Matternal affective quality of relationship
- d. Dependent Variable: paternal affective quality of relationahip

#### Coefficients

			dardized icients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	102.382	4.964		20.624	.000
	Social Desirability Scale Mean	-17.746	5.396	326	-3.289	.001
2	(Constant)	111.109	5.754		19.309	.000
	Social Desirability Scale Mean	-18.813	5.226	346	-3.599	.001
	Schwarz inter-parental conflict scale total	162	.059	263	-2.744	.007
3	(Constant)	84.629	13.392		6.320	.000
	Social Desirability Scale Mean	-18.776	5.121	345	-3.667	.000
	Schwarz inter-parental conflict scale total	159	.058	259	-2.751	.007
	Matternal affective quality of relationship	.265	.121	.205	2.180	.032

a. Dependent Variable: paternal affective quality of relationahip

**Excluded Variables** 

					Partial	Collinearity Statistics
Model		Beta In	t	Sig.	Correlation	Tolerance
1	mother as source of support	.128 <sup>a</sup>	1.295	.199	.135	.996
	Schwarz inter-parental conflict scale total	263 <sup>a</sup>	-2.744	.007	278	.994
	Matternal affective quality of relationship	.210 <sup>a</sup>	2.165	.033	.222	1.000
	mother as facilitator of independence	.200 <sup>a</sup>	2.045	.044	.211	.997
2	mother as source of support	.149 <sup>b</sup>	1.556	.123	.163	.990
	Matternal affective quality of relationship	.205 <sup>b</sup>	2.180	.032	.225	.999
	mother as facilitator of independence	.155 <sup>b</sup>	1.598	.114	.167	.960
3	mother as source of support	169 <sup>c</sup>	812	.419	086	.203
	mother as facilitator of independence	. <b>033</b> <sup>c</sup>	.264	.792	.028	.556

a. Predictors in the Model: (Constant), Social Desirability Scale Mean

D.1.3 Step 3: Paternal promotion of independence was regressed on social desirability, then on maternal feelings of affect, maternal promotion of independence, mother feelings of support, and maternal conflict with father.

**Model Summary** 

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.377ª	.142	.133	9.60837
2	.480 <sup>b</sup>	.230	.213	9.15155
3	.520 <sup>c</sup>	.270	.246	8.96181

- Predictors: (Constant), Schwarz inter-parental conflict scale total
- b. Predictors: (Constant), Schwarz inter-parental conflict scale total, Matternal affective quality of relationship
- c. Predictors: (Constant), Schwarz inter-parental conflict scale total, Matternal affective quality of relationship, mother as source of support

b. Predictors in the Model: (Constant), Social Desirability Scale Mean, Schwarz inter-parental conflict scale total

C. Predictors in the Model: (Constant), Social Desirability Scale Mean, Schwarz inter-parental conflict scale total, Matternal affective quality of relationship

d. Dependent Variable: paternal affective quality of relationahip

#### **ANOVA<sup>d</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1393.598	1	1393.598	15.095	.000ª
l	Residual	8401.198	91	92.321		
	Total	9794.796	92			
2	Regression	2257.215	2	1128.607	13.476	.000b
	Residual	7537.581	90	83.751		
:	Total	9794.796	92			
3	Regression	2646.850	3	882.283	10.985	.000 <sup>c</sup>
]	Residual	7147.946	89	80.314		
	Total	9794.796	92			

- a. Predictors: (Constant), Schwarz inter-parental conflict scale total
- b. Predictors: (Constant), Schwarz inter-parental conflict scale total, Matternal affective quality of relationship
- C. Predictors: (Constant), Schwarz inter-parental conflict scale total, Matternal affective quality of relationship, mother as source of support
- d. Dependent Variable: father as facilitator of independence

#### Coefficients

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	69.480	1.609		43.173	.000
	Schwarz inter-parental conflict scale total	101	.026	377	-3.885	.000
2	(Constant)	52.726	5.438		9.696	.000
	Schwarz inter-parental conflict scale total	099	.025	371	-4.007	.000
	Matternal affective quality of relationship	.168	.052	.297	3.211	.002
3	(Constant)	52.258	5.329		9.806	.000
	Schwarz inter-parental conflict scale total	089	.025	332	-3.596	.001
1	Matternal affective quality of relationship	.386	.112	.685	3.459	.001
	mother as source of support	386	.175	437	-2.203	.030

a. Dependent Variable: father as facilitator of independence

**Excluded Variables** 

					Partial	Collinearity Statistics
Model		Beta In	t	Sig.	Correlation	Tolerance
1	Social Desirability Scale Mean	207 <sup>a</sup>	-2.174	.032	223	.994
	mother as source of support	.173 <sup>a</sup>	1.802	.075	.187	.995
	Matternal affective quality of relationship	.297 <sup>a</sup>	3.211	.002	.321	1.000
	mother as facilitator of independence	.253 <sup>a</sup>	2.644	.010	.268	.962
2	Social Desirability Scale Mean	206 <sup>b</sup>	-2.278	.025	235	.994
	mother as source of support	437 <sup>b</sup>	-2.203	.030	227	.208
	mother as facilitator of independence	. <b>099</b> <sup>b</sup>	.795	.429	.084	.557
3	Social Desirability Scale Mean	179 <sup>c</sup>	-1.981	.051	207	.969
	mother as facilitator of independence	.077 <sup>c</sup>	.629	.531	.067	.554

a. Predictors in the Model: (Constant), Schwarz inter-parental conflict scale total

D.1.4 Step 4: Father feelings of support was regressed on social desirability, then on maternal feelings of affect, maternal promotion of independence, mother feelings of support, and maternal conflict with father.

**Model Summary** 

Model	R	R Square	Adju <b>sted</b> R Square	Std. Error of the Estimate
1	.297ª	.088	.078	14.21765
2	. <b>44</b> 6 <sup>b</sup>	.199	.181	13.39791
3	.516 <sup>c</sup>	.266	.241	12.89598

- a. Predictors: (Constant), Social Desirability Scale Mean
- b. Predictors: (Constant), Social Desirability Scale Mean, mother as facilitator of independence
- c. Predictors: (Constant), Social Desirability Scale Mean, mother as facilitator of independence, Schwarz inter-parental conflict scale total

b. Predictors in the Model: (Constant), Schwarz inter-parental conflict scale total, Matternal affecti quality of relationship

C. Predictors in the Model: (Constant), Schwarz inter-parental conflict scale total, Matternal affective quality of relationship, mother as source of support

d. Dependent Variable: father as facilitator of independence

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1776.303	1	1776.303	8.787	.004ª
i	Residual	18394.879	91	202.142		
	Total	20171.183	92			
2	Regression	4015.825	2	2007.912	11.186	.000 <sup>b</sup>
	Residual	16155.358	90	179.504		
	Total	20171.183	92			
3	Regression	5369.915	3	1789.972	10.763	.000 <sup>c</sup>
1	Residual	14801.268	89	166.306		
	Total	20171.183	92			

- a. Predictors: (Constant), Social Desirability Scale Mean
- b. Predictors: (Constant), Social Desirability Scale Mean, mother as facilitator of independence
- c. Predictors: (Constant), Social Desirability Scale Mean, mother as facilitator of independence, Schwarz inter-parental conflict scale total
- d. Dependent Variable: father as source of support

#### Coefficients

			dardized icients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	54.354	3.139		17.316	.000
	Social Desirability Scale Mean	-10.114	3.412	297	-2.964	.004
2	(Constant)	24.568	8.937		2.749	.007
	Social Desirability Scale Mean	-10.727	3.220	315	-3.332	.001
	mother as facilitator of independence	.462	.131	.334	3.532	.001
3	(Constant)	34.580	9.290		3.722	.000
	Social Desirability Scale Mean	-11.305	3.106	332	-3.640	.000
	mother as facilitator of independence	.392	.128	.283	3.055	.003
	Schwarz inter-parental conflict scale total	102	.036	265	-2.853	.005

a. Dependent Variable: father as source of support

**Excluded Variables** 

					Partial	Collinearity Statistics
Model		Beta In	t	Sig.	Correlation	Tolerance
1	mother as source of support	.166 <sup>a</sup>	1.666	.099	.173	.996
	Schwarz inter-parental conflict scale total	319 <sup>a</sup>	-3.352	.001	333	.994
	Matternal affective quality of relationship	.180 <sup>a</sup>	1.817	.073	.188	1.000
	mother as facilitator of independence	.334 <sup>a</sup>	3.532	.001	.349	.997
2	mother as source of support	011 <sup>b</sup>	102	.919	011	.726
	Schwarz inter-parental conflict scale total	265 <sup>b</sup>	-2.853	.005	290	.958
	Matternal affective quality of relationship	058 <sup>b</sup>	468	.641	050	.589
3	mother as source of support	.054 <sup>c</sup>	.494	.622	.053	.695
	Matternal affective quality of relationship	013 <sup>c</sup>	108	.914	012	.578

a. Predictors in the Model: (Constant), Social Desirability Scale Mean

D.1.5 Step 5: Maternal conflict with father was regressed on social desirability, then the three maternal subscales.

No significant relations were found.

b. Predictors in the Model: (Constant), Social Desirability Scale Mean, mother as facilitator of independence

<sup>&</sup>lt;sup>C.</sup> Predictors in the Model: (Constant), Social Desirability Scale Mean, mother as facilitator of independence, Schwarz inter-parental conflict scale total

d. Dependent Variable: father as source of support

Figure D2 Caucasian Group Normal Probability Plot of the Regression Standardized Residuals of Path Analysis 2

#### Normal P-P Plot of Regression Standardized Residual

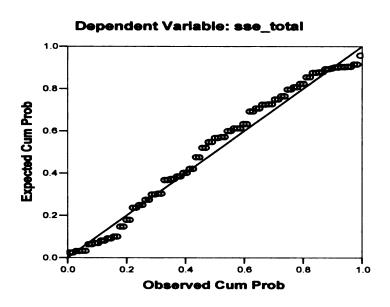


Figure D3 Caucasian Group Residuals Scatter plot for Path Analysis 2

#### **Scatterplot**

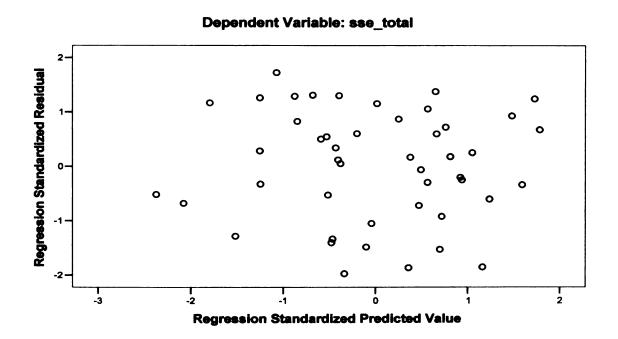


Table D Caucasian Group Path 2 Decompositions and Calculations of

	ced Correlations	page 1 of 2
Reproduced r's	Path Decompositions	<u>r</u> _
r <sub>16</sub>	= p <sub>61</sub> = (259) (D)	=259
r <sub>17</sub>	= p <sub>71</sub> = (332) (D)	=332
r <sub>18</sub>	= p <sub>81</sub> = (265) (D)	=265
r <sub>19</sub>	= $p_{91} + p_{61}p_{96}$ = $(350) + (259)(.224)$ (D) (I)	=408
 Γ <sub>26</sub>	= p <sub>62</sub> = (.205) (D)	= .205
r <sub>27</sub>	= p <sub>72</sub> + r <sub>25</sub> p <sub>75</sub> = (.685) + (.885)(437) ( D) (U)	= .298
r <sub>28</sub>	= r <sub>23</sub> p <sub>83</sub> = (.640) (.283) ( U )	= .181
r <sub>29</sub>	= p <sub>62</sub> p <sub>96</sub> + r <sub>25</sub> p <sub>95</sub> = (.205)(.224) + (.885)(.377) ( I ) (U)	= .380
r <sub>36</sub>	= r <sub>23</sub> p <sub>62</sub> = (.640)(.205) (U)	= .131
r <sub>37</sub>	= r <sub>23</sub> p <sub>72+</sub> r <sub>23</sub> p <sub>72</sub> = (.640)(.685) + (.522)(437) (U) (U)	= .211
r <sub>38</sub>	= p <sub>83</sub> = (.283) (D)	= .283
39	= $r_{35}p_{95} + r_{32}p_{62}p_{96}$ = $(.522)(.377) + (.640)(.205)(.224)$ (U)	= .226

Table D		page 2	2 of 2
r <sub>46</sub>	= =	P <sub>64</sub> (345) (D)	=345
Γ <sub>48</sub>	= =	P <sub>84</sub> (332) (D)	=332
<b>1</b> 49	= =	P <sub>64</sub> P <sub>96</sub> (345)(.224) (1)	=077
r <sub>56</sub>	= =	r <sub>25</sub> p <sub>62</sub> (.885)(.205) (U)	= .181
r <sub>57</sub>	= =	p <sub>75</sub> + r <sub>25</sub> p <sub>72</sub> (437) + (.885)(.685) (D) (U)	= .169
r <sub>58</sub>	=	r <sub>53</sub> p <sub>83</sub> (.522)(.283) (U)	= .148
r59	= =	p <sub>95</sub> + r <sub>52</sub> p <sub>62</sub> p <sub>96</sub> (.377) + (.885)(.205)+ (.224) (D) (U)	= .378
r <sub>69</sub>	= =	P <sub>96</sub> + P <sub>61</sub> P <sub>91 +</sub> P <sub>61</sub> P <sub>51</sub> P <sub>95</sub> (.224) + (259) (350) + (259) (246)(.377) (D) (S) (S)	= .339
r <sub>79</sub>	=	P75P95 + P71P91 + P71P61P96 + P72P62P96 + P75F25P62P96 + P72	725 <b>P</b> 95
	=	(437)(.377) + (332)(350) + (332)(259)(.224) + (.685)(.205)(.224) (S) (S) (S) (S) (S) + (437)(.885)(.205)(.224) + (.685)(.885)(.377) (S) (S)	=.230
Γ <sub>89</sub>	=	P81P91 + P84P64P96 + P81P61P96 + P83F35P95 + P83F23P62P96	
	=	(265)(350) + (332)(-345)(224) + (-265)(259)(.224) (S) (S) (S) (283)(.522)(.377)+ (.283)(.640)(.205)(.224) (S) (S)	+ = .280

Figure D4 Caucasian Group Path 2 Paternal Promotion of Independence

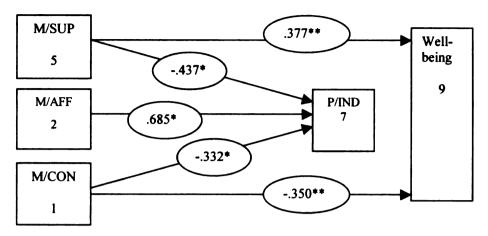


Figure D5 Caucasian Group Path 2 Paternal Feelings of Affect

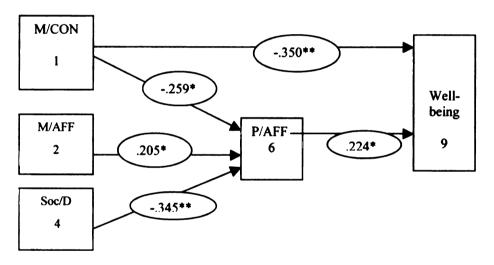
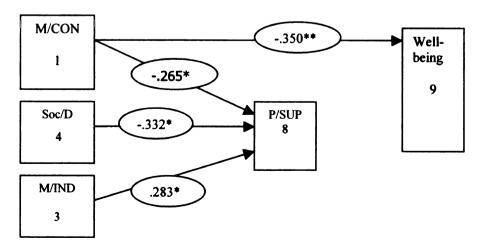


Figure D6 Caucasian Group Path 2 Paternal Feelings of Support



## APPENDIX E

## African American and Hispanic Group Path Analysis 2

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Figure E1 African American and Hispanic Group Stepwise Multiple Regression for Path Analysis 2

E.1.1 Step 1: Well-being was regressed on ethnic identity and social desirability, then on maternal feelings of affect, maternal promotion of independence, mother feelings of support, maternal conflict with father, paternal affective quality of relationship, paternal promotion of independence, and father feelings of support.

### **Model Summary**

						C	hange Stat	istics	
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	, ,	F Change	df1	df2	Sig. F Change
1	.543ª	.294	.286	2.26300	.294	35.059	1	84	.000
2	.711 <sup>b</sup>	.506	.494	1.90516	.211	35.518	1	83	.000
3	.821 <sup>c</sup>	.675	.663	1.55501	.169	42.587	1	82	.000
4	.864 <sup>d</sup>	.746	.733	1.38264	.071	22.720	1	81	.000
5	.880°	.775	.761	1.31009	.029	10.220	1	80	.002
6	.890 <sup>f</sup>	.792	.777	1.26596	.018	6.675	1	79	.012

a. Predictors: (Constant), Social Desirability Scale Mean

b. Predictors: (Constant), Social Desirability Scale Mean, eth\_mean

c. Predictors: (Constant), Social Desirability Scale Mean, eth\_mean, Matternal affective quality of relationship

d. Predictors: (Constant), Social Desirability Scale Mean, eth\_mean, Matternal affective quality of relationship, fathe of independence

e. Predictors: (Constant), Social Desirability Scale Mean, eth\_mean, Matternal affective quality of relationship, fathe of independence, father as source of support

f. Predictors: (Constant), Social Desirability Scale Mean, eth\_mean, Matternal affective quality of relationship, father of independence, father as source of support, paternal affective quality of relationship

#### ANOVA®

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	179.541	1	179.541	35.059	.000ª
	Residual	430.178	84	5.121		
1	Total	609.719	85			
2	Regression	308.459	2	154.229	42.492	.000b
Ì	Residual	301.260	83	3.630		
}	Total	609.719	85			
3	Regression	411.438	3	137.146	56.717	.000°
Į.	Residual	198.281	82	2.418		
	Total	609.719	85			·
4	Regression	454.871	4	113.718	59.485	.000 <sup>d</sup>
	Residual	154.848	81	1.912		
	Total	609.719	85			
5	Regression	472.412	5	94.482	55.049	.000e
	Residual	137.307	80	1.716		
	Total	609.719	85			
6	Regression	483.109	6	80.518	50.240	.000 <sup>f</sup>
	Residual	126.610	79	1.603		
	Total	609.719	85			

- a. Predictors: (Constant), Social Desirability Scale Mean
- b. Predictors: (Constant), Social Desirability Scale Mean, eth\_mean
- Predictors: (Constant), Social Desirability Scale Mean, eth\_mean, Matternal affective quality of relationship
- d. Predictors: (Constant), Social Desirability Scale Mean, eth\_mean, Matternal affective quality of relationship, father as facilitator of independence
- e. Predictors: (Constant), Social Desirability Scale Mean, eth\_mean, Matternal affective quality of relationship, father as facilitator of independence, father as source of support
- f. Predictors: (Constant), Social Desirability Scale Mean, eth\_mean, Matternal affective quality of relationship, father as facilitator of independence, father as source of support, paternal affective quality of relationahip
- 9. Dependent Variable: sse\_total

			dardized	Standardized		
			cients	Coefficients	_	
Model 1	(Constant)	B 47.404	Std. Error	Beta	t	Sig.
•	(Constant) Social Desirability	17.124	.724		23.665	.000
	Scale Mean	-6.013	1.015	543	-5.921	.000
2	(Constant)	8.475	1.574		5.385	.000
	Social Desirability Scale Mean	-5.742	.856	518	-6.707	.000
	eth_mean	2.586	.434	.460	5.960	.000
3	(Constant)	.120	1.814		.066	.947
	Social Desirability Scale Mean	-3.166	.803	286	-3.945	.000
	eth_mean	2.298	.357	.409	6.438	.000
	Matternal affective quality of relationship	.080	.012	.476	6.526	.000
4	(Constant)	553	1.619		341	.734
	Social Desirability Scale Mean	-3.005	.714	271	-4.207	.000
	eth_mean	1.952	.326	.348	5.996	.000
	Matternal affective quality of relationship	.061	.012	.363	5.256	.000
	father as facilitator of independence	.057	.012	.303	4.767	.000
5	(Constant)	659	1.534		430	.669
	Social Desirability Scale Mean	-3.242	.681	293	-4.761	.000
	eth_mean	1.819	.311	.324	5.846	.000
	Matternal affective quality of relationship	.061	.011	.366	5.589	.000
	father as facilitator of independence	.044	.012	.231	3.604	.001
	father as source of support	.036	.011	.187	3.197	.002
6	(Constant)	.155	1.516		.102	.919
	Social Desirability Scale Mean	-4.138	.744	373	-5.563	.000
	eth_mean	2.040	.313	.363	6.525	.000
	Matternal affective quality of relationship	.059	.011	.354	5.586	.000
	father as facilitator of independence	.056	.013	.295	4.418	.000
	father as source of support	.093	.024	.481	3.783	.000
	paternal affective quality of relationahip	048	.018	369	-2.584	.012

a. Dependent Variable: sse\_total

		<u>T</u>		
Model		Beta In	t	Sig.
1	eth_mean	.460ª	5.960	.000
	Matternal affective quality of relationship	.534 <sup>a</sup>	6.051	.000
	mother as facilitator of independence	.405 <sup>a</sup>	4.850	.000
	mother as source of support	.310 <sup>a</sup>	3.288	.001
	paternal affective quality of relationahip	. <b>403</b> <sup>a</sup>	4.813	.000
	father as facilitator of independence	.510 <sup>a</sup>	6.639	.000
	father as source of support	.390 <sup>a</sup>	4.772	.000
	Schwarz inter-parental conflict scale total	.125 <sup>a</sup>	1.327	.188
2	Matternal affective quality of relationship	.476 <sup>b</sup>	6.526	.000
	mother as facilitator of independence	.399 <sup>b</sup>	6.023	.000
	mother as source of support	.355 <sup>b</sup>	4.732	.000
	paternal affective quality of relationahip	.279 <sup>b</sup>	3.541	.001
	father as facilitator of independence	.417 <sup>b</sup>	6.080	.000
	father as source of support	.304 <sup>b</sup>	4.217	.000
	Schwarz inter-parental conflict scale total	.048 <sup>b</sup>	.588	.558
3	mother as facilitator of independence	.234 <sup>c</sup>	3.099	.003
	mother as source of support	0 <b>5</b> 6 <sup>c</sup>	453	.651
	paternal affective quality of relationahip	.226 <sup>c</sup>	3.482	.001
	father as facilitator of independence	.303 <sup>c</sup>	4.767	.000
	father as source of support	.260 <sup>c</sup>	4.430	.000
	Schwarz inter-parental conflict scale total	.040 <sup>c</sup>	.604	.547

E.1.2 Step 2: Ran same stepwise multiple regression as step 1, excluding mother as source of support, maternal promotion of independence, and maternal conflict with father.

R<sup>2</sup> and Beta's of significant variables was unchanged.

E.1.3 Step 3: Father feelings of support was regressed on ethnic identity and social desirability, then on maternal feelings of affect, maternal promotion of independence, mother feelings of support, and maternal conflict with father.

**Model Summary** 

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.216ª	.047	.035	13.66470
2	.365 <sup>b</sup>	.133	.112	13.11028
3	.437 <sup>c</sup>	.191	.162	12.73888

- a. Predictors: (Constant), eth\_mean
- b. Predictors: (Constant), eth\_mean, mother as facilitator of independence
- C. Predictors: (Constant), eth\_mean, mother as facilitator of independence, Schwarz inter-parental conflict scale total

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	769.557	1	769.557	4.121	.046ª
	Residual	15684.827	84	186.724		
	Total	16454.384	85			
2	Regression	2188.385	2	1094.193	6.366	.003 <sup>b</sup>
	Residual	14265.999	83	171.880		
	Total	16454.384	85		[	
3	Regression	3147.506	3	1049.169	6.465	.001 <sup>c</sup>
1	Residual	13306.877	82	162.279	ľ	
	Total	16454.384	85			

- a. Predictors: (Constant), eth\_mean
- b. Predictors: (Constant), eth\_mean, mother as facilitator of independence
- C. Predictors: (Constant), eth\_mean, mother as facilitator of independence, Schwarz inter-parental conflict scale total
- d. Dependent Variable: father as source of support

Model			dardized icients	Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
1	(Constant)	20.516	10.282		1.995	.049
	eth_mean	6.309	3.108	.216	2.030	.046
2	(Constant)	-1.052	12.396		085	.933
	eth_mean	6.109	2.983	.209	2.048	.044
	mother as facilitator of independence	.351	.122	.294	2.873	.005
3	(Constant)	4.627	12.270		.377	.707
	eth_mean	7.205	2.933	.247	2.457	.016
	mother as facilitator of independence	.299	.121	.250	2.479	.015
	Schwarz inter-parental conflict scale total	098	.040	248	-2.431	.017

a. Dependent Variable: father as source of support

Model		Beta In	•	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1	Social Desirability Scale Mean	.034 <sup>a</sup>		.754	.034	.997
	Matternal affective quality of relationship	.080 <sup>a</sup>	.745	.459	.081	.982
	mother as facilitator of independence	.294 <sup>a</sup>	2.873	.005	.301	.999
	mother as source of support	.045 <sup>a</sup>	.418	.677	.046	.997
	Schwarz inter-parental conflict scale total	293 <sup>a</sup>	-2.830	.006	297	.978
2	Social Desirability Scale Mean	.104 <sup>b</sup>	.992	.324	.109	.948
	Matternal affective quality of relationship	153 <sup>b</sup>	-1.188	.238	130	.628
	mother as source of support	050 <sup>b</sup>	462	.645	051	.903
	Schwarz inter-parental conflict scale total	2 <b>48</b> b	-2.431	.017	259	.948
3	Social Desirability Scale Mean	.168 <sup>c</sup>	1.621	.109	.177	.901
	Matternal affective quality of relationship	154 <sup>c</sup>	-1.23 <del>4</del>	.221	136	.628
	mother as source of support	101 <sup>c</sup>	948	.346	105	.872

a. Predictors in the Model: (Constant), eth\_mean

b. Predictors in the Model: (Constant), eth\_mean, mother as facilitator of independence

C. Predictors in the Model: (Constant), eth\_mean, mother as facilitator of independence, Schwarz inter-parental conflict scale total

d. Dependent Variable: father as source of support

E.1.4 Step 4: Paternal promotion of independence was regressed on ethnic identity and social desirability, then on maternal feelings of affect, maternal promotion of independence, mother feelings of support, and maternal conflict with father.

**Model Summary** 

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.256ª	.066	.054	13.75988
2	.344 <sup>b</sup>	.118	.097	13.44464
3	. <b>495</b> °	.245	.218	12.51638

a. Predictors: (Constant), eth\_mean

b. Predictors: (Constant), eth\_mean, Social Desirability Scale Mean

c. Predictors: (Constant), eth\_mean, Social Desirability Scale Mean, mother as facilitator of independence

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1114.913	1	1114.913	5.889	.017ª
	Residual	15904.075	84	189.334		
	Total	17018.988	85			
2	Regression	2016.044	2	1008.022	5.577	.005 <sup>b</sup>
	Residual	15002.944	83	180.758		
	Total	17018.988	85			
3	Regression	4172.897	3	1390.966	8.879	.000 <sup>c</sup>
	Residual	12846.091	82	156.660		
	Total	17018.988	85			

a. Predictors: (Constant), eth\_mean

b. Predictors: (Constant), eth\_mean, Social Desirability Scale Mean

C. Predictors: (Constant), eth\_mean, Social Desirability Scale Mean, mother as facilitator of independence

d. Dependent Variable: father as facilitator of independence

Coefficients<sup>2</sup>

			dardized cients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	36.146	10.354		3.491	.001
1	eth_mean	7.594	3.130	.256	2.427	.017
2	(Constant)	46.382	11.107		4.176	.000
	eth_mean	7.232	3.062	.244	2.362	.021
	Social Desirability Scale Mean	-13.489	6.041	230	-2.233	.028
3	(Constant)	15.501	13.273		1.168	.246
	eth_mean	7.106	2.851	.239	2.492	.015
	Social Desirability Scale Mean	-8.735	5.768	149	-1.514	.134
	mother as facilitator of independence	.443	.120	.365	3.710	.000

a. Dependent Variable: father as facilitator of independence

Excluded Variables<sup>d</sup>

					Partial	Collinearity Statistics
Model		Beta In	t	Sig.	Correlation	Tolerance
1	Social Desirability Scale Mean	230 <sup>8</sup>	-2.233	.028	238	.997
	Matternal affective quality of relationship	.398 <sup>a</sup>	4.066	.000	.408	.982
	mother as facilitator of independence	.398 <sup>a</sup>	4.119	.000	.412	.999
	mother as source of support	.247 <sup>a</sup>	2.402	.019	.255	.997
	Schwarz inter-parental conflict scale total	042 <sup>a</sup>	396	.693	043	.978
2	Matternal affective quality of relationship	.374 <sup>b</sup>	3.312	.001	.343	.745
	mother as facilitator of independence	.365 <sup>b</sup>	3.710	.000	.379	.950
	mother as source of support	.184 <sup>b</sup>	1.656	.102	.180	.839
	Schwarz inter-parental conflict scale total	.018 <sup>b</sup>	.164	.870	.018	.915
3	Matternal affective quality of relationship	.203 <sup>c</sup>	1.499	.138	.164	.495
	mother as source of support	. <b>09</b> 5	.881	.381	.097	.789
	Schwarz inter-parental conflict scale total	.067 <sup>c</sup>	.656	.513	.073	.900

a. Predictors in the Model: (Constant), eth\_mean

# E.1.5 Step 5: Repeated step 4 excluding Social desirability.

## **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.256ª	.066	.054	13.75988
2	.473 <sup>b</sup>	.224	.205	12.61348
3	.511 <sup>c</sup>	.262	.235	12.38002

- a. Predictors: (Constant), eth\_mean
- b. Predictors: (Constant), eth\_mean, mother as facilitator of independence
- c. Predictors: (Constant), eth\_mean, mother as facilitator of independence, Matternal affective quality of relationship

b. Predictors in the Model: (Constant), eth\_mean, Social Desirability Scale Mean

C. Predictors in the Model: (Constant), eth\_mean, Social Desirability Scale Mean, mother as facilitator of independence

d. Dependent Variable: father as facilitator of independence

## ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1114.913	1	1114.913	5.889	.017ª
	Residual	15904.075	84	189.334		
	Total	17018.988	85			
2	Regression	3813.692	2	1906.846	11.985	.000b
İ	Residual	13205.297	83	159.100		
	Total	17018.988	85			
3	Regression	4451.275	3	1483.758	9.681	.000 <sup>c</sup>
	Residual	12567.713	82	153.265		
	Total	17018.988	85			

- a. Predictors: (Constant), eth\_mean
- b. Predictors: (Constant), eth\_mean, mother as facilitator of independence
- C. Predictors: (Constant), eth\_mean, mother as facilitator of independence, Matternal affective quality of relationship
- d. Dependent Variable: father as facilitator of independence

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	36.146	10.354		3.491	.001
	eth_mean	7.594	3.130	.256	2.427	.017
2	(Constant)	6.400	11.927		.537	.593
	eth_mean	7.318	2.870	.247	2.550	.013
	mother as facilitator of independence	.484	.117	.398	4.119	.000
3	(Constant)	081	12.129		007	.995
	eth_mean	6.450	2.848	.217	2.264	.026
	mother as facilitator of independence	.307	.144	.253	2.130	.036
	Matternal affective quality of relationship	.215	.106	.244	2.040	.045

a. Dependent Variable: father as facilitator of independence

**Excluded Variables** 

					Partial	Collinearity Statistics
Model		Beta In	t	Sig.	Correlation	Tolerance
1	Matternal affective quality of relationship	.398 <sup>a</sup>	4.066	.000	.408	.982
	mother as facilitator of independence	.398 <sup>a</sup>	4.119	.000	.412	.999
	mother as source of support	.247 <sup>a</sup>	2.402	.019	.255	.997
	Schwarz inter-parental conflict scale total	042 <sup>a</sup>	396	.693	043	.978
2	Matternal affective quality of relationship	.244 <sup>b</sup>	2.040	.045	.220	.628
	mother as source of support	.138 <sup>b</sup>	1.360	.178	.148	.903
	Schwarz inter-parental conflict scale total	.030 <sup>b</sup>	.300	.765	.033	.948
3	mother as source of support	203 <sup>c</sup>	938	.351	104	.192
	Schwarz inter-parental conflict scale total	.031 <sup>c</sup>	.314	.755	.035	.948

a. Predictors in the Model: (Constant), eth\_mean

E.1.6 Step 6: Paternal affective quality of relationship was regressed on ethnic identity and social desirability, then on maternal feelings of affect, maternal promotion of independence, mother feelings of support, and maternal conflict with father.

**Model Summary** 

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.330ª	.109	.098	19.75561
2	.394 <sup>b</sup>	.156	.135	19.34641
3	. <b>496</b> <sup>c</sup>	.246	.218	18.39827

- a. Predictors: (Constant), eth\_mean
- b. Predictors: (Constant), eth\_mean, Social Desirability Scale Mean
- c. Predictors: (Constant), eth\_mean, Social Desirability Scale Mean, Schwarz inter-parental conflict scale total

b. Predictors in the Model: (Constant), eth\_mean, mother as facilitator of independence

C. Predictors in the Model: (Constant), eth\_mean, mother as facilitator of independence, Matternal affective quality of relationship

d. Dependent Variable: father as facilitator of independence

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4005.472	1	4005.472	10.263	.002ª
ì	Residual	32783.877	84	390.284		
1	Total	36789.349	85			
2	Regression	5723.805	2	2861.903	7.646	.001 <sup>b</sup>
	Residual	31065.544	83	374.284		
	Total	36789.349	85			
3	Regression	9032.663	3	3010.888	8.895	.000 <sup>c</sup>
	Residual	27756.686	82	338.496		
	Total	36789.349	85			

- a. Predictors: (Constant), eth\_mean
- b. Predictors: (Constant), eth\_mean, Social Desirability Scale Mean
- C. Predictors: (Constant), eth\_mean, Social Desirability Scale Mean, Schwarz inter-parental conflict scale total
- d. Dependent Variable: paternal affective quality of relationahip

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	33.102	14.865		2.227	.029
	eth_mean	14.394	4.493	.330	3.204	.002
2	(Constant)	47.237	15.982		2.956	.004
	eth_mean	13.894	4.406	.318	3.153	.002
	Social Desirability Scale Mean	-18.627	8.694	216	-2.143	.035
3	(Constant)	46.785	15.200		3.078	.003
	eth_mean	16.092	4.249	.369	3.787	.000
	Social Desirability Scale Mean	-11.843	8.547	138	-1.386	.170
	Schwarz inter-parental conflict scale total	185	.059	313	-3.127	.002

a. Dependent Variable: paternal affective quality of relationahip

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1	Social Desirability Scale Mean	216 <sup>a</sup>		.035	229	.997
	Matternal affective quality of relationship	.209 <sup>a</sup>	2.051	.043	.220	.982
	mother as facilitator of independence	.263 <sup>a</sup>	2.646	.010	.279	.999
	mother as source of support	.161 <sup>a</sup>	1.579	.118	.171	.997
	Schwarz inter-parental conflict scale total	349 <sup>a</sup>	-3.576	.001	365	.978
2	Matternal affective quality of relationship	.135 <sup>b</sup>	1.153	.252	.126	.745
	mother as facilitator of independence	. <b>226</b> <sup>b</sup>	2.241	.028	.240	.950
	mother as source of support	.089 <sup>b</sup>	.811	.420	.089	.839
	Schwarz inter-parental conflict scale total	313 <sup>b</sup>	-3.127	.002	326	.915
3	Matternal affective quality of relationship	.141 <sup>c</sup>	1.271	.207	.140	.744
	mother as facilitator of independence	.190 <sup>c</sup>	1.949	.055	.212	.935
	mother as source of support	.043 <sup>c</sup>	.405	.686	.045	.821

a. Predictors in the Model: (Constant), eth\_mean

b. Predictors in the Model: (Constant), eth\_mean, Social Desirability Scale Mean

C. Predictors in the Model: (Constant), eth\_mean, Social Desirability Scale Mean, Schwarz inter-parental conflict scale total

d. Dependent Variable: paternal affective quality of relationahip

# E.1.7 Step 7: Ran step 6 excluding social desirability.

## **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.330ª	.109	.098	19.75561
2	.477 <sup>b</sup>	.228	.209	18.49994
3	.520 <sup>c</sup>	.270	.243	18.09697

a. Predictors: (Constant), eth\_mean

b. Predictors: (Constant), eth\_mean, Schwarz inter-parental conflict scale total

c. Predictors: (Constant), eth\_mean, Schwarz inter-parental conflict scale total, mother as facilitator of independence

#### ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4005.472	1	4005.472	10.263	.002ª
	Residual	32783.877	84	390.284		
	Total	36789.349	85			
2	Regression	8382.797	2	4191.398	12.247	.000b
	Residual	28406.552	83	342.248		
	Total	36789.349	85			
3	Regression	9934.309	3	3311.436	10.111	.000°
	Residual	26855.039	82	327.500		
	Total	36789.349	85			

a. Predictors: (Constant), eth\_mean

b. Predictors: (Constant), eth\_mean, Schwarz inter-parental conflict scale total

C. Predictors: (Constant), eth\_mean, Schwarz inter-parental conflict scale total, mother as facilitator of independence

d. Dependent Variable: paternal affective quality of relationahip

## Coefficients<sup>a</sup>

		Unstand Coeffi	dardized cients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	33.102	14.865		2.227	.029
	eth_mean	14.394	4.493	.330	3.204	.002
2	(Constant)	38.327	13.997		2.738	.008
	eth_mean	16.637	4.254	.381	3.911	.000
	Schwarz inter-parental conflict scale total	205	.057	349	-3.576	.001
3	(Constant)	14.849	17.430		.852	.397
	eth_mean	16.184	4.167	.371	3.884	.000
	Schwarz inter-parental conflict scale total	183	.057	311	-3.212	.002
	mother as facilitator of independence	.373	.171	.209	2.177	.032

a. Dependent Variable: paternal affective quality of relationahip

_					Partial	Collinearity Statistics
Model		Beta In	t	Sig.	Correlation	Tolerance
1	Matternal affective quality of relationship	.209 <sup>a</sup>	2.051	.043	.220	.982
	mother as facilitator of independence	.263 <sup>a</sup>	2.646	.010	.279	.999
	mother as source of support	.161 <sup>a</sup>	1.579	.118	.171	.997
	Schwarz inter-parental conflict scale total	349 <sup>a</sup>	-3.576	.001	365	.978
2	Matternal affective quality of relationship	.173 <sup>b</sup>	1.792	.077	.194	.970
	mother as facilitator of independence	.209 <sup>b</sup>	2.177	.032	.234	.968
	mother as source of support	. <b>087</b> <sup>b</sup>	.874	.385	.096	.944
3	Matternal affective quality of relationship	.076 <sup>c</sup>	.637	.526	.071	.628
	mother as source of support	.031 <sup>c</sup>	.301	.764	.033	.872

a. Predictors in the Model: (Constant), eth\_mean

b. Predictors in the Model: (Constant), eth\_mean, Schwarz inter-parental conflict scale total

C. Predictors in the Model: (Constant), eth\_mean, Schwarz inter-parental conflict scale total, mother as facilitator of independence

d. Dependent Variable: paternal affective quality of relationahip

E.1.8 Step 8: Ethnic identity was regressed on social desirability, then on maternal affective quality of relationship, maternal promotion of independence, mother as source of support, maternal conflict with father, paternal feelings of affect, father promotion of independence, and father feelings of support.

### **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.330ª	.109	.098	.45286
2	. <b>4</b> 17 <sup>b</sup>	.174	.154	.43863

- a. Predictors: (Constant), paternal affective quality of relationahip
- b. Predictors: (Constant), paternal affective quality of relationahip, Schwarz inter-parental conflict scale total

### **ANOVA<sup>C</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.105	1	2.105	10.263	.002ª
	Residual	17.227	84	.205		
	Total	19.331	85			
2	Regression	3.363	2	1.681	8.739	.000b
	Residual	15.969	83	.192		
	Total	19.331	85		_	

- a. Predictors: (Constant), paternal affective quality of relationahip
- b. Predictors: (Constant), paternal affective quality of relationahip, Schwarz inter-parental conflict scale total
- c. Dependent Variable: eth\_mean

## Coefficients

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	2.667	.196		13.635	.000
	paternal affective quality of relationahip	.008	.002	.330	3.204	.002
2	(Constant)	2.303	.237		9.721	.000
	paternal affective quality of relationahip	.009	.002	.408	3.911	.000
	Schwarz inter-parental conflict scale total	.004	.001	.267	2.557	.012

a. Dependent Variable: eth\_mean

**Excluded Variables** 

					Partial	Collinearity Statistics
Model		Beta In	t	Sig.	Correlation	Tolerance
1	Social Desirability Scale Mean	.025 <sup>a</sup>	.238	.812	.026	.946
	Matternal affective quality of relationship	.055 <sup>a</sup>	.512	.610	.056	.938
	mother as facilitator of independence	071 <sup>a</sup>	663	.509	073	.927
	mother as source of support	106 <sup>a</sup>	-1.023	.309	112	.980
	Schwarz inter-parental conflict scale total	.267 <sup>a</sup>	2.557	.012	.270	.914
	father as facilitator of independence	.109 <sup>a</sup>	.890	.376	.097	.706
	father as source of support	319 <sup>a</sup>	-1.495	.139	162	.230
2	Social Desirability Scale Mean	025 <sup>b</sup>	236	.814	026	.912
	Matternal affective quality of relationship	.059 <sup>b</sup>	.569	.571	.063	.937
	mother as facilitator of independence	045 <sup>b</sup>	430	.668	047	.917
	mother as source of support	056 <sup>b</sup>	543	.588	060	.939
	father as facilitator of independence	. <b>053</b> <sup>b</sup>	.433	.666	.048	.680
	father as source of support	321 <sup>b</sup>	-1.557	.123	170	.230

a. Predictors in the Model: (Constant), paternal affective quality of relationahip

E.1.9 Step 9: Social desirability was regressed on ethnic identity, then on maternal affective quality of relationship, maternal promotion of independence, mother as source of support, maternal conflict with father, paternal feelings of affect, father promotion of independence, and father feelings of support.

b. Predictors in the Model: (Constant), paternal affective quality of relationahip, Schwarz inter-parental conflict scale total

c. Dependent Variable: eth\_mean

## **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.494ª	.244	.235	.21143
2	.533 <sup>b</sup>	.284	.267	.20698

- a. Predictors: (Constant), Matternal affective quality of relationship
- b. Predictors: (Constant), Matternal affective quality of relationship, Schwarz inter-parental conflict scale total

#### ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.211	1	1.211	27.093	.000ª
l	Residual	3.755	84	.045		
	Total	4.966	85			
2	Regression	1.410	2	.705	16.460	.000b
	Residual	3.556	83	.043		
	Total	4.966	85			

- a. Predictors: (Constant), Matternal affective quality of relationship
- b. Predictors: (Constant), Matternal affective quality of relationship, Schwarz inter-parental conflict scale total
- c. Dependent Variable: Social Desirability Scale Mean

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	1.379	.138		9.995	.000
•	Matternal affective quality of relationship	007	.001	494	-5.205	.000
2	(Constant)	1.270	.144		8.797	.000
	Matternal affective quality of relationship	007	.001	476	-5.107	.000
	Schwarz inter-parental conflict scale total	.001	.001	.201	2.156	.034

a. Dependent Variable: Social Desirability Scale Mean

Model		Data Is		<u>.</u>	Partial	Collinearity Statistics
1	oth moon	Beta In	t	Sig.	Correlation	Tolerance
<b>!</b> '	eth_mean	.013ª	.137	.891	.015	.982
	mother as facilitator of independence	.113 <sup>a</sup>	.953	.344	.104	.642
	mother as source of support	.077 <sup>a</sup>	.437	.663	.048	.290
	Schwarz inter-parental conflict scale total	.201 <sup>a</sup>	2.156	.034	.230	.992
	paternal affective quality of relationahip	117 <sup>a</sup>	-1.201	.233	131	.938
	father as facilitator of independence	041 <sup>a</sup>	390	.698	043	.820
	father as source of support	.076 <sup>a</sup>	.797	.428	.087	.988
2	eth_mean	020 <sup>b</sup>	208	.836	023	.957
	mother as facilitator of independence	.154 <sup>b</sup>	1.316	.192	.144	.628
	mother as source of support	.207 <sup>b</sup>	1.149	.254	.126	.264
	paternal affective quality of relationahip	064 <sup>b</sup>	642	.523	071	.864
	father as facilitator of independence	049 <sup>b</sup>	479	.634	053	.819
	father as source of support	.134 <sup>b</sup>	1.401	.165	.153	.928

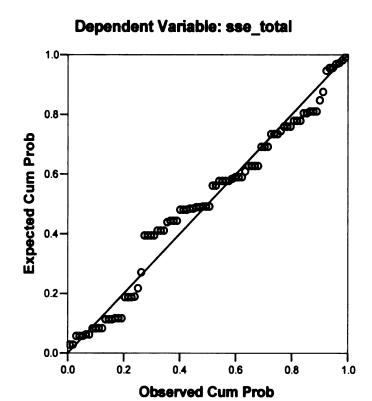
a. Predictors in the Model: (Constant), Matternal affective quality of relationship

b. Predictors in the Model: (Constant), Matternal affective quality of relationship, Schwarz inter-parental conflict scale total

c. Dependent Variable: Social Desirability Scale Mean

Figure E2 African American and Hispanic group Normal Probability Plot of the Regression Standardized Residuals for Path Analysis 1

# Normal P-P Plot of Regression Standardized Residual



**Figure E3** African American and Hispanic Residuals Scatter plot for Path Analysis 1

# **Scatterplot**

# Dependent Variable: sse\_total

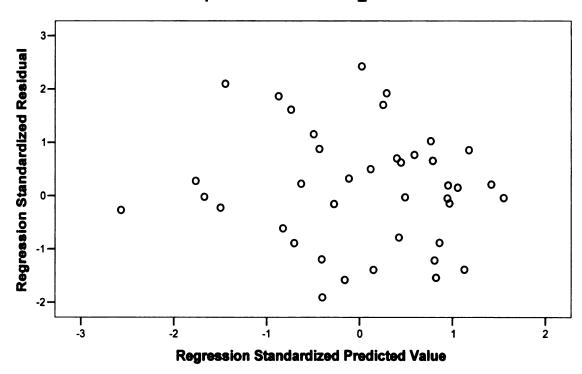


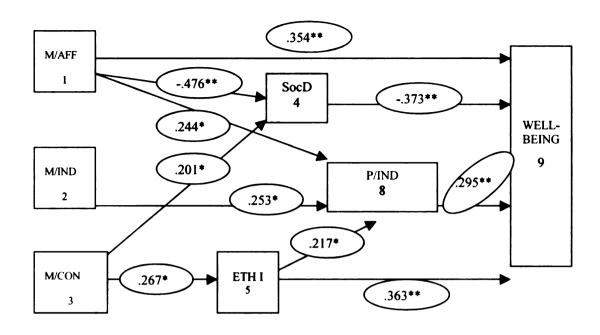
Table EAfrican American and Hispanic Group Path 2 Decompositions and<br/>Calculations of Reproduced CorrelationsPage 1 of 4

Reproduced r's	Path Decompositions	<u>r</u>
r <sub>14</sub>	= p <sub>41</sub>	
	= (476)	=476
	(D)	
r <sub>15</sub>	$=$ $r_{12}p_{82}p_{85}$	
. 15		= .051
	(U)	
_		
r <sub>16</sub>	$= p_{61} + r_{12}p_{62}$ = (.244) + (.598) (.253)	= .395
	(D) (U)	J <del>J</del> J
	(5)	
r <sub>17</sub>	$= r_{12}p_{12}$	
	• • • • • • • • • • • • • • • • • • • •	= .150
	(U)	
r <sub>18</sub>	$= r_{12}p_{82}$	
. 10		= .124
	(U) '	
_		
<i>r</i> <sub>19</sub>	$= p_{91} + p_{61}p_{96} + p_{41}p_{94} + r_{12}p_{62}p_{98} + r_{12}p_{82}p_{85}p_{95} + r_{12}p_{62}p_{65}p_{75}p_{97}$	
	+ $\Gamma_{12}$ P <sub>82</sub> P <sub>85</sub> P <sub>65</sub> P <sub>96</sub> + $\Gamma_{12}$ P <sub>62</sub> P <sub>96</sub> + $\Gamma_{12}$ P <sub>72</sub> P <sub>97</sub>	= .683
	= (.354) + (.244)(.295) + (476)(373) + (.598)(.209)(369)	.000
	(D) (1) (U)	
	+ (.598)(.209)(.408)(.363)+ (.598)(.209)(.408)(.247)(.481)	
	(U) (U)	
	+ (.598)(.209)(.408)(.217)(.295) + (.598)(.253)(.295)	
	(U) (U)	
	+ (.598)(.250)(.480)	
	(U)	
r <sub>24</sub>	= r <sub>12</sub> p <sub>42</sub>	
- 24		=285
	(U)	
r <sub>25</sub>	$= p_{02}p_{05}$ $= (.209)(.408)$	= .085
	- (.209)(.400) (1)	065
	(.,	
r <sub>26</sub>	$= p_{62} + p_{82}p_{85}p_{65} + r_{12}p_{62}$	
		= .417
	(D) (I) (U)	
r <sub>27</sub>	$= p_{72} + p_{82}p_{85}p_{75}$	
2.		= .271
	(D) (1)	
r	- a	
r <sub>28</sub>	= p <sub>82</sub> = (.209)	= .209
	(D)	
	• •	

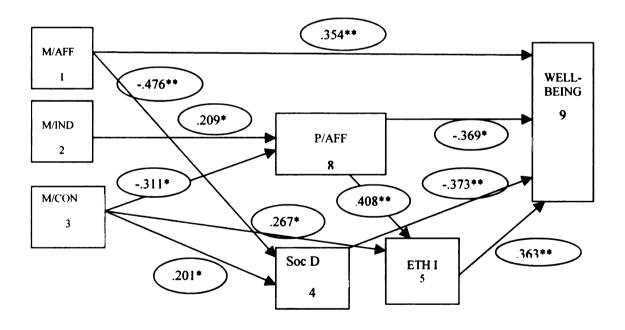
```
Table E
                                                                                                                   page 2 of 4
                                        p_{82}p_{98} + p_{82}p_{85}p_{95} + p_{82}p_{85}p_{75}p_{97} + p_{82}p_{85}p_{65}p_{96} + p_{62}p_{96} + p_{72}p_{97}
r<sub>29</sub>
                                        + \Gamma_{12}P_{91} + \Gamma_{12}P_{61}P_{96} + \Gamma_{12}P_{41}P_{94}
                                        (.209)(-.369) + (.209)(.408)(.363) + (.209)(.408)(.247)(.481)
                                        (1)
                                                            (1)
                                                                                        (1)
                                        + (.209)(.408)(.217)(.295)+ (.253)(.295) + (.250)(.481)
                                           (1)
                                                                             (1)
                                                                                                 (1)
                                        + (.598)(.354) + (.598)(.244)(.295) + (.598)(-.476)(-.373)
                                                                                                                               = .525
                                           (U)
                                                               (U)
                                                                                            (U)
r<sub>34</sub>
                                                                                                                               = .201
                                        (.201)
                                        (D)
                                        P<sub>53</sub> + P<sub>83</sub>P<sub>85</sub>
r35
                                        (.267) + (-.31)(.408)
                                                                                                                               = .140
                                                     (1)
                                        (D)
                                         P53P65 + P83P85P65
r<sub>36</sub>
                                        (.267)(.217) + (-.311)(.408)(.217)
                                                                                                                               =.030
                                         (1)
                                                               (1)
                                        P73 + P53P75 + P83P85P75
r37
                                        (.248) + (.267)(.247) + (-.311)(.408)(.247)
                                                                                                                               = -.213
                                                   (1)
                                        (D)
                                                                         (1)
                                        P83
r<sub>38</sub>
                                                                                                                               = -.311
                                        (-.311)
                                        (D)
                                         p_{43}p_{94} + p_{73}p_{97} + p_{53}p_{95} + p_{53}p_{75}p_{97} + p_{35}p_{56}p_{96} + p_{83}p_{98} + p_{83}p_{85}p_{95}
r<sub>39</sub>
                                         + P83P85P75P97 + P83P85P65P96
                                        (.201)(-.373) + (-.248)(.481)(.267)(.363) + (.267)(.247)(.481)
                                        (1)
                                                              (I)
                                                                                                    (I)
                                        + (.267)(.217)(.295) + (-.311)(-.369) + (-.311)(.408)(.363)
                                                                        (1)
                                           (I)
                                                                                               (I)
                                         + (-.311)(.408)(.247)(.481) + (-.311)(.408)(.217)(.295)
                                                                                                                               = -.003
                                            (1)
                                                                                   (1)
                                        P43P54 + P43P83P85 + P41 \(\Gamma_{12}\) P82P85
145
                                        (.201)(.267) + (.201)(-.311)(.408) + (-.476)(.598)(.209)(.408) = .004
                                                             (S)
                                                                                           (S)
                                         \mathsf{p}_{43}\mathsf{p}_{53}\mathsf{p}_{65} + \mathsf{p}_{41}\mathsf{p}_{61} + \mathsf{p}_{43}\mathsf{p}_{83}\mathsf{p}_{85}\mathsf{p}_{65} + \mathsf{p}_{41}\mathsf{r}_{12}\mathsf{p}_{62} + \mathsf{p}_{41}\mathsf{r}_{21}\mathsf{p}_{82}\mathsf{p}_{85}\mathsf{p}_{65}
r<sub>46</sub>
                                        (.201)(.267)(.217) + (-.476)(.244) + (.201)(-.311)(.408)(.217)
                                                                                            (S)
                                         (S)
                                                                        (S)
                                                                                                                               = -.187
                                         + (-.476)(.598)(.253)+ (-.476)(.598)(.209)
                                            (S)
                                                                       (S)
                                         p_{43}p_{73} + p_{43}p_{53}p_{75} + p_{43}p_{83}p_{85}p_{75} + p_{41}r_{12}p_{72} + p_{41}r_{12}p_{82}p_{85}p_{75}
1747
                                        (.201)(-.248) + (.201)(.267)(.247) + (.201)(-.311)(.408)(.247)
                                                               (S)
                                                                                           (S)
                                         + (-.476)(.598)(.252) + (-.476)(.598)(.209)(.408)(.247)
                                                                                                                               = -.120
                                           (S)
                                                                         (S)
```

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Table E
                                                                                                                  page 3 of 4
r<sub>48</sub>
                                        p_{43}p_{83} + p_{41}r_{12}p_{82}
                                        (.201)(-.311) + (-.476)(.598)(.209)
                                                                                                                              = -.122
                                         (S)
                                                               (S)
149
                                       p_{94} + p_{43}p_{73}p_{97} + p_{43}p_{53}p_{95} + p_{43}p_{83}p_{85}p_{95} + p_{43}p_{83}p_{85}p_{75}p_{97}
                                        + P43P53P75P97 + P41P91
                                                                                +p_{41}p_{61}p_{96} + p_{41}r_{12}p_{72}p_{97} + p_{41}r_{12}p_{62}p_{96}
                                        + p<sub>41</sub>r<sub>12</sub>p<sub>82</sub>p<sub>98</sub>
                                                                    + p_{41}\Gamma_{12}p_{82}p_{85}p_{95} + p_{41}\Gamma_{12}p_{82}p_{85}p_{57}p_{97}
                                                                                                                              = -.604
                                       (-.373)+(.201)(-.248)(.481)+(.201)(.267)(.363)+(.201)(-.311)(-.369)
                                        + (.201)(-.311)(.408)(.363) + (.201)(-.311)(.408)(.247)(.481)
                                       + (.201)(.267)(.247)(.481) + (-.476)(.354) + (-.476)(.244)(.295)
                                                                               (S)
                                        + (-.476)(.598)(.250)(.481) + (-476)(.598)(.253)(.295)
                                        + (-.476)(.598)(.209)(-.369) + (-.476)(.598)(.209)(.408)(.363)
                       +(-.476)(.598)(.209)(.408)(247)(.481)+(-.476)(.598)(.209)(.408)(.217)(.295)
r<sub>56</sub>
                                        P<sub>65</sub>
                                       (.217)
                                                                                                                              = .217
                                       (D)
r<sub>57</sub>
                                       P<sub>75</sub>
                                        (.247)
                                                                                                                              = .247
                                        P<sub>85</sub> + P<sub>53</sub>P<sub>83</sub>
r<sub>58</sub>
                                       (.408) + (.267)(-.311)
                                                                                                                              = -.325
                                                   (S)
                                        (D)
                                       p_{95} + p_{75}p_{97} + p_{85}p_{98} + p_{65}p_{96} + p_{53}p_{43}p_{94} + p_{53}p_{83}p_{98}
r<sub>59</sub>
                                       (.363) + (.247)(.481) + (.408)(-.369) + (.217)(.295) + (.267)(-.248)(.481)
                                                                       (S)
                                                   (1)
                                                                                                               (S)
                                                                                             (1)
                                        + (2.67)(.201)(-.373) + (.267)(-.311)(-.369)
                                                                                                                              = .374
                                          (S)
                                                                          (S)
r<sub>69</sub>
                                       p_{96} + p_{62}p_{28}p_{85}p_{95} + p_{62}p_{82}p_{85}p_{75}p_{97} + p_{62}p_{72}p_{97} + p_{62}p_{82}p_{98}
                                        + p_{62}\Gamma_{12}p_{91} + p_{62}\Gamma_{12}p_{41}p_{97} + p_{61}p_{91} + p_{61}p_{41}p_{94} + p_{61}\Gamma_{12}p_{72}p_{97}
                                                                                                                              = .539
                                        + p_{61}\Gamma_{12}p_{82}p_{98} + p_{61}\Gamma_{12}p_{82}p_{85}p_{95} + p_{61}\Gamma_{12}p_{82}p_{85}p_{75}p_{97}
                                     (.295) + (.253)(.209)(.408)(.363) + (.253)(.209)(.408)(.247)(.481)
                                                     (S)
                                        + (.253)(.250)(.481) + (.253)(.209)(-.369) + (.253)(.598)(.354)
                                                       (S)
                                       + (.253)(.598)(-.476)(-.373) + (.244)(.354) + (2.44)(-.476)(-.373)
                                                                                (S)
                                       + (.244)(.598)(.250)(.481) + (.244)()(.598)(.209)(-.369)
                                       +(.244)(.598)(.209)(.408)(.363)+ (.244)(.598)(.209)(.408)(.247)(.481)
```

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Table E
                                                                                                       page 4 of 4
r79
                                  P97 + P75P95 + P75P65P96 + P73P53P95 + P73P53P65P96 + P73P83P85P95
                                    + p_{73}p_{83}p_{98} + p_{72}p_{82}p_{98} + p_{73}p_{83}p_{85}p_{65}p_{96} + p_{72}p_{82}p_{85}p_{95}
                                    + p_{72}p_{82}p_{85}p_{65}p_{95} + p_{72}\Gamma_{12}p_{61}p_{96} + p_{72}\Gamma_{12}p_{91} + p_{72}\Gamma_{12}p_{41}p_{94}
                    = (.481)+(.247)(.363)+(247)(.217)(.295)+(-.248).267)(.363)+(-.248)(-.311)(-.369)
                                    (D)
                                             (S)
                                                              (S)
                                                                                     (S)
                    + (-.248)(.267)(.217)(.295) + (-.248)(-.311)(.408)(.363) + (.250)(.209)(-.369)
                                                                       (S)
                                       (S)
                                                                                                          (S)
                    + (-.248)(-.311)(.408)(.217)(.295)+ (.250)(.209)(.408)(.363)
                    + (.250)(.209)(.408)(.217)(.265) + (.250)(.598)(.244)(.295)
                    + (.250)(.598)(.354) + (.250)(.598)(-.476)(-.373)
                                                                                                                  = .457
                                     (S)
r<sub>89</sub>
                                    p_{98} + p_{85}p_{95} + p_{85}p_{75}p_{97} + p_{82}p_{62}p_{96} + p_{82}p_{72}p_{97} + p_{82}r_{12}p_{91} + p_{82}r_{12}p_{61}p_{96}
                                    + p_{82}r_{12}p_{41}p_{94} + p_{83}p_{53}p_{95} + p_{83}p_{53}p_{75}p_{97} + p_{83}p_{73}p_{97} + p_{83}p_{53}p_{65}p_{96}
                                    (-.369) + (.408)(.363) + (.408)(.249)(.481) + (.408)(.217)(.295)
                                                (1)
                                                                  (1)
                                                                                           (1)
                                     + (.209)(.253)(.295) +(.209)(.250)(.481) + (.209)(.598)(.354)
                                                                 (S)
                                                                                           (S)
                                     + (.209)(.598)(.244)(.295) + (.209)(.598)(-.476)(-373)
                                     + (-.311)(.201)(-.373) + (-.311)(.267)(.363) + (-
.311)(.267)(.247)(.481)
                                     + (-3.11)(.267)(.217)(.295) + (-.311)(-.248)(.481)
                                                                                                                  = .117
                                        (S)
                                                                             (S)
```



**Figure E4** African American and Hispanic Group Path 2 Paternal Promotion of Independence



**Figure E5** African American and Hispanic Group Path 2 Paternal Feelings of Affect

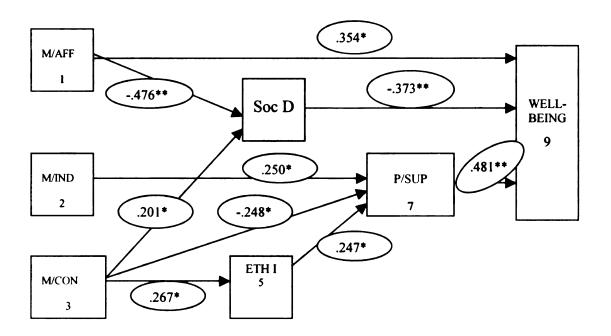


Figure E6 African American and Hispanic Group Path 2 Father Feelings of Support

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