EXAMINING THE RELEVANCE OF PARENT-ADOLESCENT RELATIONSHIPS IN THE ROMANTIC RELATIONSHIP QUALITY OF YOUNG ADULTS

by

ADRYANNA SIQUEIRA DRAKE

B.S., Universidade Catolica de Goias, 2003
M.A., Kansas State University, 2008
M.S., Kansas State University, 2010

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

School of Family Studies and Human Services
College of Human Ecology

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2013

Abstract

This study prospectively examined how parent-adolescent relationships influence romantic relationship quality of offspring, utilizing the National Longitudinal Survey of Adolescent Health (ADD Health, n = 3,946). Further, this study investigated whether self-esteem and depression symptoms mediated these relationships, and if gender was a significant moderator. Adolescent girls who perceived their relationships with their mothers and fathers to be strong were more likely to have better quality romantic relationships as young adults. This relationship was found to be direct and indirect, through the effect of self-esteem. Adolescent boys who perceived their relationship with their father to be strong and whose mothers were more knowledgeable about them were less likely to experience depression symptoms as young adults, and in turn, to have better quality romantic relationships. Adolescent boys whose mothers perceived to have a strong relationship with them had higher self-esteem as young adults. Finally, there were significant differences between boys and girls in that the association between mother knowledge and depression symptoms was stronger for boys. Results support the stability of parent-adolescent relationships in influencing future relationships and highlight the importance of parent-adolescent relationships in predicting psychological wellbeing and romantic relationship quality.

EXAMINING THE RELEVANCE OF ADOLESCENT-PARENT RELATIONSHIPS IN THE ROMANTIC RELATIONSHIP QUALITY OF YOUNG ADULTS

by

ADRYANNA SIQUEIRA DRAKE

B.S., Universidade Catolica de Goias, 2003
M.A., Kansas State University, 2008
M.S., Kansas State University, 2010

A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

School of Family Studies and Human Services
College of Human Ecology

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2013

Approved by:

Major Professor
Jared R. Anderson, PhD

Abstract

This study prospectively examined how parent-adolescent relationships influence romantic relationship quality of offspring, utilizing the National Longitudinal Survey of Adolescent Health (ADD Health, n = 3,946). Further, this study investigated whether self-esteem and depression symptoms mediated these relationships, and if gender was a significant moderator. Adolescent girls who perceived their relationships with their mothers and fathers to be strong were more likely to have better quality romantic relationships as young adults. This relationship was found to be direct and indirect, through the effect of self-esteem. Adolescent boys who perceived their relationship with their father to be strong and whose mothers were more knowledgeable about them were less likely to experience depression symptoms as young adults, and in turn, to have better quality romantic relationships. Adolescent boys whose mothers perceived to have a strong relationship with them had higher self-esteem as young adults. Finally, there were significant differences between boys and girls in that the association between mother knowledge and depression symptoms was stronger for boys. Results support the stability of parent-adolescent relationships in influencing future relationships and highlight the importance of parent-adolescent relationships in predicting psychological wellbeing and romantic relationship quality.

Table of Contents

List of Figures

List of Tables

Chapter 1 - Introduction

"We may not be able to prepare the future for our children, but we can at least prepare our children for the future"

Franklin D. Roosevelt

Child development theories commonly emphasize the importance of parents as children's first teachers about relationships. From their relationships with primary caregivers, children gain a sense of worth, and learn how to relate to others. Some empirical evidence supports the enduring aspect of early parent-child lessons, with family relationships influencing individual attributes and behaviors within romantic relationships as these children become adults (Conger, Cui, Bryant, & Elder, 2000; Overbeek et al, 2007; Whitbeck et al, 1992). Utilizing the Development of Early Adult Romantic Relationship Model (DEARR, Bryant & Conger, 2002), this study seeks to further investigate the relevance of parent-adolescent relationships in shaping young adults' romantic relationship quality. More specifically, what elements of parent-adolescent relationships, namely, parent-adolescent involvement or parent-adolescent relationship quality, are most important for their children's future romantic relationship quality?

This study also examines the mediating role of depression symptoms and self-esteem in the association between parent-adolescent relationships and future romantic relationship quality, as well as the moderating role of gender. Understanding and identifying factors that influence romantic relationship success is relevant for several reasons. First, romantic relationship distress has been associated with partners' emotional and physical distress, with partners in lower quality relationships experiencing poorer mental and physical health outcomes compared to those in higher quality relationships (Hawkins & Booth, 2005; Wickrama, Lorenz, Conger, & Elder, 1997). Second, romantic relationship conflict and dissolution have effects that go beyond individual partners, negatively affecting children with behavioral, emotional, and social consequences (Amato, Buhler-Kane, & Spencer, 2011). Although patterns within the current romantic relationship are relevant in predicting romantic relationship quality, empirical evidence suggests that dysfunctional relationship patterns may be first learned in family-of-origin relationships and later carried into romantic relationships (Amato, 1996; Conger, Schoffield, & Neppl, 2012; Cui et al, 2010). By identifying how family-of-origin experiences are associated

with romantic relationship quality, it may be possible to expand knowledge regarding prevention and intervention with families and couples.

Chapter 2 - Literature Review

Theoretical Framework

The theoretical framework guiding the present study is the Development of Early Adult Romantic Relationships Model (DEARR Model; Bryant & Conger, 2002). The DEARR Model was specifically developed to understand romantic relationship success from a developmental perspective, and proposes that successful romantic relationships depend on pre-relationship predictors, particularly relationship-promoting and relationship-inhibiting experiences in the family-of-origin. In fact, family-of-origin-experiences such as parent-child interactions, parental divorce, parents' marital conflict, and socioeconomic advantage, have been shown in the literature to be associated with offspring emotional stability and relationship competence (Conger et al, 1994; Conger et al, 2000; Sassler, Cunningham, & Lichter, 2009; Elder, Eccles, Ardelt, & Lord, 1995).

Therefore, the DEARR model proposes that family-of-origin experiences indirectly affect future relationship outcomes through their effect on individual attributes of the offspring (e.g., depression and self-esteem). These individual attributes develop, in part, due to the influence of relationship-promoting or inhibiting experiences in the family-of-origin which will be relevant in one's ability to initiate and maintain a successful intimate relationship. Thus, according to the DEARR model, family-of-origin experiences in which parents are involved, nurturant, and consistent in their parenting are expected to be associated with greater success in their adult children's extrafamilial relationships, through the influence of individual attributes of the young adult (Bryant & Conger, 2002).

The link between parent-child relationships and romantic relationship quality

In recent decades, more attention has been given to family-of-origin influences in order to understand and predict the romantic relationship quality of offspring. The intergenerational transmission of relationship dynamics has been the focus of several studies, particularly the intergenerational transmission of divorce (Amato, 1996; Feng, Giarusso, Bengston, & Frye,

1999), marital conflict (Cui, Fincham, & Pasley, 2008; Cui & Fincham, 2010), and violence (Kwong, Bartholomew, Henderson, & Trinke, 2003; Cui, et al, 2010).

In addition to examining the transmission of parents' marital dynamics, another aspect of family-of-origin experiences that has been increasingly examined is the association between parent-child relationships and children's future romantic relationship outcomes. Belsky and Isabella (1985) examined adult children's retrospective reports on how one was reared, perceptions of parents' marital quality, and how these perceptions were associated with changes in relationship quality during the transition to parenthood. Recollections of more frequent cold-rejecting parent-child relationships were associated with poorer adjustment in the transition to parenthood only for wives. Wives who recollected cold-rejecting parenting during childhood experienced more conflict with their partner during the transition to parenthood and greater declines in relationship satisfaction, when compared to individuals who recalled warm-accepting parent-child relationships.

Conger and colleagues (2000), in their study of the developmental roots of competence in romantic relationships followed seventh graders through adulthood. Using behavioral observation of family interactions, their findings indicated that nurturant-involved parenting (defined as a combination of positive parental affect or warmth, parental monitoring with appropriate rules, standards, positive reinforcement, and consistent parental discipline) during childhood was associated with romantic relationships characterized by warmth, support, and low hostility in adulthood, and consequently, more satisfying relationships. Similar results were found by Dinero and colleagues (Dinero, Conger, Shaver, Widaman, & Larsen-Rife, 2011), who followed individuals over a span of 12 years. They found that warmth and sensitivity observed in family relationships when target adolescents were 15 years old was associated with observed warmth and sensitivity in romantic relationships when targets were 25 years old, and attachment security at age 27. Another study (Hart-Parade, Supple, & Helms, 2012) investigated parent reports of spanking and yelling, or harsh parenting, when children were eight years old on average. Harsh parenting was found to be negatively associated with romantic relationship satisfaction of these children as they became young adults. Praise and hugs from parents during childhood, also called parental warmth, was associated with romantic relationship satisfaction of young adults through the influence of family cohesion during adolescence. These findings were consistent for adolescent boys and girls.

Donellan, Larsen-Life and Conger (2005) examined adolescents' personality characteristics and parent-adolescent relationships, and how these were associated with their romantic relationship quality when they became young adults. Using observational data, cold-rejecting parenting and negative emotionality were associated with lower romantic relationship quality directly and indirectly, via the effect of negative couple interactions. Gender differences were not investigated, and only mothers participated in this study. Finally, Overbeek and colleagues (2007), further investigated the association between parent-child relationships, future romantic relationship quality and life satisfaction, and found that the quality of parent-child relationships when children were 4-10 years old was associated with partner romantic relationship quality when the target children were 25 years old, through the effect of parent-adolescent conflict. Better relationship quality at age 25 was associated with better life satisfaction at age 37. Their findings suggested continuity in the quality of relationships over time, in that parents that were perceived to be affectionate with their child at ages 4-10 were likely to experience less conflict with their child as an adolescent (15-17). Less parent-adolescent conflict was then related to perceptions of higher romantic relationship quality when the young adult was 25, and with better life satisfaction at age 37. The small sample of this study did not allow the investigation of gender differences in these findings, and only data about mothers was used in this study.

In summary, studies to date support the relevance of family of origin experiences as relationship-promoting or relationship inhibiting experiences (Bryant & Conger, 2002) that are relevant to adult romantic relationship competence. Direct associations between parenting that is characterized by warmth and support and future romantic relationship quality have been found, and a few of the potential mediators for this association have also been investigated, including: family cohesion (Hart-Parade et al, 2012), target affective behaviors towards partner (Conger et al, 2000), parent-adolescent conflict (Overbeek et al, 2007) and negative interactions (Donnellan, et al, 2005). The different contributions of mothers and fathers and child gender differences have not commonly been the focus of these investigations.

Depression Symptoms and Self-esteem as Potential Mediators of the Relationship Between Parent-Adolescent Relationships and Adult Romantic Relationship Quality

Parent-child relationships and children's mental health outcomes (depression symptoms and self-esteem)

Parent-child relationships are important in understanding children's current and future psychological adjustment. Several studies have investigated the importance of parent-child relationships in predicting a variety of psychological outcomes.

Dmitrieva, Chen, Greenberger, and Gil-Rivas (2004) conducted a cross-sectional study of eleventh graders in the U.S, China, Korea, and Czech Republic, examining how adolescent perceptions of parent-child relationships mediate the relationship between negative family life events and the development of depression symptoms. Their findings indicated that when faced with negative family life events, adolescents who perceived their parents to be involved and to have less conflict in the parent-adolescent relationship were less likely to experience depression symptoms. Conversely, adolescents who perceived parent-child relationships as marked by less involvement and more conflict experienced more depression symptoms when a negative family life event occurred. Consistent with other findings (Elder, Nguyen, & Caspi, 1985), Dmitrieva and colleagues' (2004) results indicate that negative life events are associated with poorer adolescent psychological adjustment through the mediating role of parent-child relationships. The influence of parent-child relationships on future psychological adjustment has also found support from neurobiology, in that low parental care during childhood has been found to be associated with differences in cortisol levels, more depression and anxiety symptoms, lower self-esteem, and a lower threshold for managing stressful life events in adulthood (Engert, Efanov, Dedovic, Dagher, & Pruessner, 2011; Gunnar & Donzella, 2007).

Although parenting interactions have been found to be predictive of children's psychological adjustment, some studies investigated the specific and unique contribution of mothers and fathers (or maternal and paternal figures). For instance, Day and Padilla-Walker (2009) examined intact families and the relevance of maternal and paternal involvement and connectedness in adolescents' internalizing and externalizing behaviors, prosocial behaviors, and hope. This study used a cross-sectional sample of parents and adolescents, and counted on parents' reports of parent-child relationships. They found that fathers who rated themselves high

in involvement and high in connectedness had adolescents with fewer internalizing behaviors such as depression and anxiety symptoms, and fewer externalizing behaviors, such as delinquency. For mothers, higher self-reported maternal involvement and connectedness was associated with adolescents who presented more prosocial behaviors and hope.

Cookston and Finlay (2006) utilized the first two waves of the National Longitudinal Survey of Adolescent Health (ADD Health), and investigated the relevance of father and mother involvement in adolescent psychological adjustment. Adolescent reports of activities with fathers and mothers comprised the indicators for two variables called father involvement and mother involvement. Results indicated that only father involvement was associated with their children's overall psychological adjustment, with father involvement being negatively associated with depression symptoms.

Other studies have focused on the role of residential and non-residential fathers and child psychological adjustment. King and Sobolewski (2006) examined the relationship quality and involvement of non-residential fathers and of residential mothers with their children and children's internalizing behaviors, such as depression. They utilized cross-sectional data and adolescent reports of the relationship quality and involvement with mothers and fathers. Relationship quality was operationalized by indicators such as the likelihood the adolescent would talk to their father or mother about a problem, how much they admired their father or mother, and their assessment of the relationship. Involvement was measured by items related to the frequency of father-child contact. Father-child relationship quality and involvement were modestly associated with fewer internalizing behaviors, but mother-child relationship quality and involvement had stronger effects for child wellbeing. Children who had weaker ties with their residential mothers but good relationships with non-resident fathers exhibited fewer depression symptoms than those children who had weak ties with both parents.

Finally, comparisons between single-mother and single-father families have been less frequently investigated. One recent review (Biblarz & Stacey, 2010) highlighted findings from studies exploring parenting and child outcomes in single parent-families. Findings suggest that single mothers appear to be far more engaged with their children and to monitor them more closely than single father families, and although single mother families tend to be at risk of poverty more so than single father families, their children appear to fare better than children of single fathers. Children of single mothers are less likely to be delinquent, to abuse illegal

substances, and to have behavioral problems and more likely to have higher attachment security and better educational outcomes than children of single fathers.

In summary, empirical evidence to date supports the DEARR model (Bryant & Conger, 2002) in the relevance of family of origin relationships in developing children's individual attributes, such as depression symptoms and self-esteem. Studies have focused on differing aspects of parent-child relationships; some investigated relationship quality, or warmth and care, others investigated involvement, also called communication or connectedness. Findings generally indicated that parent-child relationships that are marked by lower involvement, lower levels of quality, closeness and care, and higher conflict are related to higher depression symptom scores and lower self-esteem scores. Fathers' involvement has been the focus of more investigations when compared to mother involvement, particularly the impact of the involvement of non-residential fathers with their children. Current findings suggest that the relationships between parent-child relationships and children's wellbeing is complex, especially as investigations focus on the interplay between parent gender and child outcomes.

Depression symptoms, self-esteem and romantic relationship quality

There is a robust association between the experience of depression symptoms and romantic relationship distress (Beach & O'Leary, 1993; Davila, Bradbury, Cohan, & Tochluk, 1997; Fincham, Beach, Harold, & Osborne, 1997; Whitton & Whisman, 2010). Most studies have found that the experience of marital distress contributes to the development or worsening of depression symptoms (Poyner-Del Vento & Cobb, 2011; Whitton & Whisman, 2010). Another group of studies indicates that the experience of depression symptoms greatly contributes to marital distress, with depression symptoms dampening relationship-promoting behaviors, such as communication, and ultimately affecting romantic relationship quality (Beach & O'Leary, 1993; Fincham et al, 1997; Ulrich-Jabukowski, Russell, & O'Hara, 1988). Finally, a few studies have supported a cyclical view of the interaction between depression symptoms and relationship distress, in that depression symptoms places relationships in a position of greater risk for distress, and relationship distress further exacerbates depression symptoms (Davila, Bradbury, & Cohan, 1997; Whisman & Uelebacker, 2009).

Similarly, self-esteem is another individual trait that has been associated with the experience of romantic relationship distress, albeit less frequently investigated than depression (Murray, 2006; Robinson & Cameron, 2012; Zeigler-Hill, Fulton, & McLemore, 2011).

Individuals with higher self-esteem appear to hold more positive evaluations of their relationships, and consequently, feel more satisfied in their romantic relationships, whereas low self-esteem is associated with poorer appraisal of relationships and greater dissatisfaction (Murray, 2006). Individuals with lower self-esteem generally appraise situations more negatively, including their romantic relationships. Therefore, they tend to act in a self-protective manner and experience lower commitment to the relationship, which ultimately can inhibit relationship success. Conversely, individuals with higher self-esteem tend to behave in more relationship-promoting ways and experience greater commitment to their romantic relationships, thereby increasing relationship satisfaction (Murray, Derrick, Leder, & Holmes, 2008; Robinson & Cameron, 2012).

There is empirical consensus in the association between an individual's psychological attributes, such as the experience of depression symptoms and low self-esteem, and poorer romantic relationship outcomes. These relationships are likely complex, involving feedback loops, in that the experience of low self-esteem and depression likely contribute to poorer romantic relationship quality, which in turn, further exacerbate feelings of low self-worth and dysphoria. Both depression symptoms and self-esteem appear to be key individual-trait factors in understanding the connection between parent-child relationships and future romantic relationship quality, as both have shown to be associated with parenting relationships and future romantic relationship quality.

The role of gender in parental involvement and parent-child relationship quality, mental health, and future romantic relationship quality

Male or female are categories related to biological characteristics (i.e., sex), while gender is related to the learned behaviors that categorize individuals as masculine or feminine, through gender socialization. These categories are intertwined, as individuals are socialized to behave in ways consistent with their biological sex, and are also treated in different ways based on their biological sex and gender display (Rysman & Meyers, 1997). For instance, there is evidence that child gender has differential effects on the extent of parent involvement in children's lives, particularly for fathers. In fact, studies have shown that the amount of time fathers spend with their children is dependent upon child gender, with fathers spending more time with sons than daughters in activities such as play, companionship activities, and academic-related activities (Lundberg, McLanahan, & Rose, 2007). In general, fathers with sons have

been found to spend more time with their children, and girls with brothers spend more time with their fathers than girls without male siblings (Mammen, 2005). Therefore, findings suggest that fathers' involvement with their children is partly dependent on gender, although mother's involvement does not seem to vary based on child gender. As mothers tend to be largely responsible for children's basic needs, it is less likely that mothers' involvement will differ based on child gender. On the other hand, fathers' involvement can be more sporadic and less related to basic needs. Still, research findings indicate fathers' greater involvement with sons perhaps is due to perceived ease of shared interests (Raley & Bianchi, 2006). Some researchers propose that fathers and mothers approach parenting differently, playing different roles in the family in that mothers are viewed as having a relationship-building role, and fathers are viewed as guardians of norm compliance (Steinberg & Silk, 2002). Less is known about whether father-child and mother-child involvement and relationship quality affect children's mental health outcomes differently based on child gender.

King and Sobolewski (2006), in their study of non-residential fathers' contribution to child wellbeing found that father-son relationship quality and involvement had only a modest contribution to boys' functioning, with boys having better grades and less acting out at school when they had fathers who were more involved. Girls who had involved non-resident fathers had no difference in school grades. However, mothers' involvement and relationship quality had stronger effects on both boys' and girls' wellbeing. Finally, adolescent boys and girls without close ties with both mothers and fathers had the highest scores in internalizing and externalizing behaviors, acting out at school, and low grades. Another study, by Flouri and Buchanan (2003), evaluated the effects of parental involvement when children were seven and sixteen years old, and how that was related to mental health outcomes when children were sixteen and thirty-three years old. Preliminary findings indicated that the association between low mother involvement at age sixteen and psychological distress at age thirty-three was stronger for daughters than for sons. Similar findings were identified for father involvement in that daughters were more negatively affected by low involvement with their fathers. Mother involvement at age seven and psychological distress at age thirty-three was significant only for daughters. Therefore, limited research evidence indicates there may be differential effects of the relationship of fathers and mothers with their children depending on child's gender. However, much more needs to be investigated in this topic as findings are inconclusive.

Gender may be a relevant element in the association in psychological wellbeing, namely, depression and self-esteem. Empirical evidence suggests that women are twice as likely as men to experience depression (Weissman, 1987). Based on this evidence, it would be expected that the association between depression and relationship quality and self-esteem and relationship quality may differ across gender. However, findings are inconclusive. Some studies found little to no difference in the association between depression symptoms and romantic relationship quality between men and women (Davila et al, 2003). Other studies indicate that relationships are affected differently depending on gender. Marriages in which the partner suffering from depression symptoms is the husband tend to be lacking in positive behaviors between the partners, whereas marriages in which the partner suffering from depression symptoms is the wife tend to have increased negative behaviors within couple interactions (Gabriel, Beach, & Bodenmann, 2010).

One longitudinal study of newlyweds found support for gender differences in the association between depression and marital distress, with higher levels of depression symptoms predicting declines in marital satisfaction for husbands, but not for wives. As husbands tend to withdraw in response to negative feelings, such a response would be associated with greater decreases in relationship satisfaction (Fincham et al, 1997).

Gender appears to be associated with self-esteem, in that men have been found to have slightly higher self-esteem than females. However, no gender differences have been found in the association between self-esteem and romantic relationship quality (Erol & Orth, 2013; Kling, Hyde, Showers, & Buswell, 1999).

In summary, studies examining gender differences in the association between psychological wellbeing and relationship distress are still scarce. Depression and self-esteem are associated with relationship distress, but findings to date suggest that gender plays different roles in these relationships. Relationship interactions differ for women and men if they are experiencing depression symptoms, but there is no clarity about whether the relationship will be more or less affected by a partner's depression symptoms, based on partner gender. Conversely, although there are gender differences in self-esteem between men and women, with men having higher self-esteem, studies to date have not found gender differences in the association between self-esteem and relationship quality.

The present study

The present study tests a portion of the DEARR model (Bryant & Conger, 2002) using the National Longitudinal Study of Adolescent Health (ADD Health), a large longitudinal dataset, that uses multiple informants, and followed children from adolescence through adulthood. This is considered an ideal approach to the investigation of romantic relationship outcomes for its greater reliability and inclusiveness of pre-relationship predictors that are relevant in the development of romantic relationships (Bryant & Conger, 2002). Additionally, this study considers the separate contributions of fathers and mothers, the effects of parent-adolescent involvement and parent-adolescent relationship quality in predicting future relationship outcomes, as well as examines the differences between adolescent report and parent report in predicting future romantic relationship quality. These contributions have yet to be examined in the same study, and are expected to provide more clarity and better understanding regarding the contributions of parent-adolescent relationship processes for future relationship outcomes.

The following hypotheses will be tested (see Figure 1 for empirical model; see Appendix for specific items that comprise each manifest or latent variable):

1.

   a. Child-mother involvement, as perceived by the target during adolescence (Time I), is expected to be associated with less depression symptoms and higher self-esteem for the target as a young adult (Time III);
   b. Child-mother relationship quality, as perceived by the target during adolescence (Time I), is expected to be associated with less depression symptoms and higher self-esteem for the target as a young adult (Time III);

2.

   a. Child-father involvement, as perceived by the target during adolescence (Time I), is expected to be associated with less depression symptoms and higher self-esteem for the target as a young adult (Time III);
   b. Child-father relationship quality, as perceived by the target during adolescence (Time I), is expected to be associated with less depression symptoms and higher self-esteem for the target as a young adult (Time III);

3.

   a. Mother knowledge about their adolescent, as perceived by the mother during target's adolescence (Time I), is expected to be associated with less depression symptoms and higher self-esteem for the target as a young adult (Time III);
   b. Mother-child relationship quality, as perceived by the mother during target's adolescence (Time I), is expected to be associated with less depression symptoms and higher self-esteem for the target as a young adult (Time III);

4. Higher depression symptoms reported by the target during young adulthood (Time III) are expected to be associated with target's lower romantic relationship quality (Time IV);
5. Higher self-esteem reported by the target during young adulthood (Time III) is expected to be associated with target's higher romantic relationship quality (Time IV);
6. Target adolescent gender is expected to moderate the proposed relationships in the model. Current findings regarding the effects of gender on these relationships are inconclusive. Based on social learning theory, as children learn gender-associated behaviors from parents of the same sex as the child (Bandura, 1977), one possible hypothesis may be that child wellbeing may be more greatly influenced by the relationship between same sex parent and child. Thus, it is expected that the association between father-adolescent relationship (involvement and quality) and adolescent mental health (depression symptoms and self-esteem) will be stronger for adolescent boys than the father-adolescent relationship for adolescent girls. Likewise, the association between mother-adolescent relationship and mental health will be stronger for adolescent girls than the mother-adolescent relationship for adolescent boys. In addition, it is expected that the association between mother perception of the relationship with the adolescent and adolescent mental health will be stronger for girls than for boys. The association between mental health and romantic relationship quality is expected to be stronger for female partners who experience depression symptoms more than for male partners, as it has been suggested that negative behaviors are commonly increased in relationships in which female partners experience depression, and thus, may become more detrimental to the relationship (Gabriel et al, 2010);
7. Adolescent and mother perceptions of parent-adolescent relationship processes (involvement and relationship quality) during adolescence are expected to be indirectly

associated with romantic relationship quality (Time IV) through the mediating effects of depression and self-esteem during young adulthood (Time III).

This study is an important contribution to the literature of romantic relationship success for several reasons. First, this study uses a prospective, longitudinal, multi-informant design, including mother and child reports following participants from adolescence to adulthood, which is considered the most potent research design for evaluating the DEARR model (Bryant & Conger, 2002). Second, the DEARR model is a strong theoretical model of romantic relationship development, as it considers pre-relationship factors of relationship success, examining family of origin experiences as relationship enhancing or inhibiting experiences in order to understand future romantic relationships. Third, this study has the potential of bringing more clarity regarding the unique contribution of mothers and fathers on later romantic relationship satisfaction. Fourth, this study includes individual attributes, self-esteem and depression symptoms, as potential mediators of the association between family of origin relationships and romantic relationship quality. Previous studies investigated mediators related to family dynamics (Hart-Parade et al, 2012; Overbeek et al, 2007), or romantic relationship dynamics (Conger et al, 2000), but not depression symptoms or self-esteem as potential mediators. Finally, although parts of the DEARR model have been tested in the past, many of these studies relied on homogeneous samples of mostly White, rural families. In order to verify the utility of the model, it is important that it is tested with more diverse samples.

In summary, the purpose of this study is to expand current findings about family-of-origin influences in future individual and relational outcomes. This is a timely and relevant issue, as it is well known that our mental and physical health are largely influenced by our romantic relationships (Hawkins & Booth, 2005) and relationship dynamics are likely to be transmitted to future generations (Amato & Booth, 1991; Cui et al, 2010; Feng et al, 1999). Therefore, studies focused on further understanding these influences can be helpful in designing interventions and preventive practices that may better support families in perpetuating a legacy of flourishing relationships.

Controls

Seven control variables were included in this model, considering findings of the extant literature. Mothers' marital status and education level at Time I are included as control variables, as research findings suggest that parents with higher education level adopt more positive

parenting practices (Fox, Platz, & Bentley, 1995). Additionally, parent marital status is associated with children's future relationship choices and relationship outcomes (Sassler, Cunningham, & Lichter, 2009). Finally, target education level, relationship length, relationship status, age and race at Time IV were included as controls, as these characteristics have been shown to be relevant in relationship outcomes, in that those who are married and those with higher education levels have more satisfactory outcomes (Bumpass, Castro Martin, & Sweet, 1991; Stanley, Rhoades, & Markman, 2006). Relationship outcomes can vary dependent upon the length of the relationship, such as differences in satisfaction and commitment (Ross & Van Willigen, 1997; Whitton & Kuryluk, 2012). Previous findings also indicate differences in relationship quality can vary for individuals of different ages and races (Roebuck & Bulanda, 2007). Race is particularly relevant, as racial dynamics shape the experiences of men and women of color and have an impact in experiences of self and relationships. These experiences are essential in understanding parent-adolescent relationships, psychological wellbeing, and the quality of romantic relationships of women and men of color (Hill Collins, 1986; Harvey Winfield, 2009).

Chapter 3 - Method

Sample

Data for this study come from three waves of the National Longitudinal Study of Adolescent Health (Add Health). Currently the largest longitudinal dataset concerning adolescent health, ADD Health was created in response to a mandate from United States Congress to increase research efforts regarding adolescent health. ADD Health was funded by the Eunice Shriver National Institute of Child Health and Human Development (NICHD) and was largely focused on adolescent health and risk factors. In subsequent waves the goals of the project were expanded to examine the association between health behaviors and risk factors and these adolescents' transition to adulthood. The dataset is comprised of four waves of data. The first wave was collected in 1994-1995, when target adolescents were between seventh and twelfth grade, or between 12 and 18 years of age. The second wave of data was collected in 1996, followed by a third wave of data collection in 2001-2002, when the target adolescent was between 18 and 24 years of age. The final wave of data collection occurred in 2007-2008 when target adolescents were 26-32 years of age. The full sample includes 20,745 adolescents who

were between seventh and twelfth grade in 1995, and were followed to adulthood. When appropriate sample weights were used, these data are a nationally representative sample of adolescents in Grades 7 through 12 in the United States. A parent or parent figure of each adolescent also was asked to complete a questionnaire (n = 17,670). A subset of this larger dataset has been made available as public use data, and it is available online. In the Wave I public use dataset, approximately 6,500 participants are available, Wave III data included 4,882 participants, and Wave IV data included 6,500 participants.

This study utilized the public use data version of the ADD Health data, specifically the first, third, and fourth waves of data, when target adolescent was between the ages of 12 and 18, 18-24, and 26-32, respectively. The sample was filtered by parent report at Time I and target relationship status at Time IV. As the majority of parent reports were from mothers, the sample was filtered by mother report, and therefore, 360 father-report respondents were removed from the sample. And as the outcome variable for this study is romantic relationship quality, only individuals who were in a romantic relationship at Time IV were selected, eliminating 1,560 respondents who were not in any kind of romantic relationship or had missing data on the romantic relationship variables. The data were first explored using descriptive statistics, in order to describe the sample (n= 3,946).

The sample was balanced in terms of gender, with slightly more women than men (55.7% and 44.3%, respectively), and the majority of respondents reported their race/ethnicity as White (43.2%), followed by African American (30.3%), Native American (10.6%), Hispanic (8%), and Asian or Pacific Islander (7.7%). All individuals included in the sample reported being in a romantic relationship, with 44.7% of individuals being married, and 55.3% of the sample comprised of individuals in cohabiting or dating relationships. Average relationship length was 58 months (M = 58.0, SD = 47.97), although relationships ranged from one month to 10 years (*range*=1-228 months). Half of the participants had earned a college degree or had some college education (50%). The subsample of mothers included in this study were on average, 37 years old at Time I (M=37.0, SD = 6.53). The majority of mothers were married (72.1%), followed by divorced (13.8%), never married (5.8%), separated (4.9%), and widowed (3.8%). Over half of the mother sample was White (51.5%), followed by Black (23.9%), Native American (13.4%), Hispanic (7.5%), and Asian and/ or Pacific Islander participants (3.7%). Half of mothers had

some at least some post-high school education (vocational, business, or trade school) (54.9%) and the majority of mothers worked outside the home (72.3%).

Measures

The item-to-construct parceling technique was utilized to create latent constructs with parceled items for adolescent's perception of relationship quality with mother and father, mother's perception of relationship quality with adolescent, depression symptoms, self-esteem, and romantic relationship quality (Little, Cunningham, Shahar, & Widaman, 2002).

Adolescent perception of mother/mother figure involvement

This is a manifest variable comprised of the sum of the scores of eleven items assessing target adolescent's report on mothers' participation in selected activities and whether the target adolescent and mother engaged in those activities in the past 4 weeks. Items included activities such as: shopping, playing sports, and talking about a problem, and target adolescent would respond "yes" or "no" to each question ("0" = no; "1" = yes). Questions were asked during the first wave of data collection, when the target adolescent was between 7th and 12th grade, or 12 to 18 years old. Higher scores indicate greater involvement.

Adolescent's perception of relationship quality with mother/mother figure

This is a latent variable, and its indicators include five items assessing the target adolescent's evaluation of their relationship with their mothers, with items assessing for warmth and care in the relationship with mother: "How close do you feel to your mother?", "How much do you think your mother cares about you?", "Your mother is warm and loving", "You are satisfied with your relationship with your mother," "You are satisfied with your communication with mother." Response items were on a 5-point scale, ranging from "not at all" to "very much," with higher scores indicating greater relationship quality. Questions were asked during the first wave of the study, when target adolescents were between grades 7th and 12th. Chronbach's α=.85.

Adolescent's perception of father/father figure involvement

This is a manifest variable, comprised of the sum of the scores of eleven items assessing target adolescent's report on fathers' involvement with adolescent in selected activities and

whether the target adolescent and father engaged in those activities in the past 4 weeks. Items included activities such as: shopping, playing sports, and talking about a problem, and target adolescent would respond "yes" or "no" to each question ("0" = no; "1" = yes). Questions were asked during the first wave of data collection, when the target adolescent was between 7th and 12th grade. Higher scores indicate greater involvement.

Adolescent perception of relationship quality with father/father figure

This is a latent variable, comprised of five items assessing the target adolescent's evaluation of their relationship with father, with items assessing for warmth and care in the relationship with father: "How close do you feel to your father?", "How much do you think your father cares about you?", "Your father is warm and loving", "You are satisfied with your relationship with your father," "You are satisfied with your communication with your father." Response items were on a 5-point scale, ranging from "not at all" to "very much," with higher scores indicating greater relationship quality. Questions were asked during first wave of the study, when target adolescents were between 7th and 12th grade. Chronbach's α=.88.

Mother/Mother figure's knowledge about the adolescent

This is a manifest variable with three items focused on mother's knowledge about their adolescent. Questions included: "Have you met adolescent's best friend in person?", "Have you met adolescent's best friend's parents?", "Have you met (adolescent's girlfriend/boyfriend) in person?" Parent would respond "yes" or "no" at each activity ("0" = no; "1" = yes). Higher scores indicate more knowledge about adolescent. Questions were asked during first wave of the study, when target adolescents were between 7th and 12th grade.

Mother/Mother figure's perception of relationship quality with adolescent

This is another latent variable focused on target adolescent's mother and their perceptions of their relationship with the target adolescent. Four items are the indicators of this latent variable assessing the mother's relationship with adolescent with questions such as: "You and adolescent get along," "You don't understand adolescent," and "You two make decisions about adolescent's life together." Response items were on a 5-point scale, ranging from "never" to "always" ("1" = never, "5" = always). Higher scores indicate better mother-adolescent

relationship quality. Questions were asked during first wave of the study, when target adolescents were between 7th and 12th grade. Chronbach's α=.63.

Depression Symptoms

Items for this scale come from a well-known, validated measure for depression, the Center for Epidemiology Studies Depression Scale (CES-D, Radloff, 1977). Nine items were indicators of this latent variable, and they assess depression symptoms, including sadness, fatigue, difficulties with concentration, and perceptions of being negatively evaluated. Responses were on a 4-point scale, ranging from "never or rarely" to "most of the time or all the time" ("1" = never, "4" = most of the time or all the time). Higher scores indicated more depression symptoms. Questions were asked during the third wave of study, when target individual was between 18 and 24 years old. Chronbach's α=.81.

Self-esteem

Three items are the indicators for this latent variable, which assesses the target individual's self-esteem, with the following questions: "Do you agree or disagree that you have many good qualities?", "Do you agree or disagree that you have a lot to be proud of?", "Do you agree or disagree that you like yourself just the way you are?" Responses were on a 5-point scale ranging from "strongly disagree" to "strongly agree" ("1" = strongly disagree, "5" = strongly agree). Higher scores indicate higher self-esteem. These items were asked of participants during the third wave of data collection, when participants were between 18 and 24 years of age. Chronbach's α=.72.

Romantic relationship quality

This latent variable includes eight indicators assessing target individual's relationship with their intimate partner, including satisfaction with the way they handle problems and handle finances, how much partner expresses love and affection, satisfaction with sex life, and trust. Responses were on a 5-point scale, ranging from "strongly disagree" to "strongly agree" ("1" = strongly disagree, "5" = strongly agree). Higher scores indicate greater relationship quality. These questions were asked of participants during the fourth wave of data collection, when participants were between the ages of 26 and 32. Chronbach's α=.90.

Control variables

Target Age

Target adolescent age was computed by subtracting the year respondent indicated they were born from the year data were collected.

Target Race

Target adolescent race was recoded, with "0" = White, and "1" = Other.

Mother's marital status

This variable corresponds to respondent mother's marital status at the time of the first interview (when target adolescent was between 7th and 12th grade). Parent was asked the following question: "What is your current marital status?" with response items including "single/never married," "married," widowed," "divorced," and "separated." This variable was recoded as a dichotomous variable, with "1" married, and "0" for all other categories.

Mother's education

This variable corresponds to respondent parent's educational level at wave I (target adolescent between 7th and 12th grade). Parent was asked the following question: "How far did you go in school?" A variety of specific responses were available, ranging from 1 to 9, including: "0" = 8th grade or less, to "9" = professional training beyond a 4-year College or University.

Target education

This variable is target's education level at wave IV (target between the ages of 26 and 32). Respondent was asked the following: "What is the highest level of education that you have achieved to date?" with response items ranging from "1" = 8th grade or less, to "13" = completed a post-baccalaureate professional education (e.g., law school, med school, nurse).

Target relationship status

Relationship status of target at Time IV (respondents were between 26 and 32 years old). A new variable was computed from other variables regarding the status of respondent's marriage ("What is the current status of your marriage?"), cohabitation ("Do either of you have a residence other than the one you share?"), and dating relationships ("Which of the following best

describe your relationship"). The new variable was a dichotomous variable, with "0" including individuals who were married, and "1" including others.

Target relationship length

This variable corresponds to respondent's relationship length with current partner at wave IV. The following question was asked: "What is the total amount of time that you have been involved in a romantic relationship or sexual relationship with this partner?" Respondents answered this question in years and months, which was then computed to the total length of their relationship in months.

Gender

Target gender is a moderating variable. It was recoded as "0" = male, and "1" = female.

Analytic Strategy

Structural Equation Modeling (SEM) is the method of choice for these analyses, as it is considered the ideal method for theory testing (Kline, 2010). Full information maximum likelihood (FIML) was used to handle missing data. The measurement model was tested first, using Confirmatory Factor Analyses (CFA), in order to verify identification and fit of the model as well as test for measurement invariance. Once model identification and fit were satisfactorily determined, the structural model was tested. Next, the moderating effect of gender was tested by applying equality constraints to a multiple-group SEM and calculating the chi-square difference test. Finally, the indirect paths from the parent-adolescent relationship variables to romantic relationship quality were tested with bootstrapping procedures (2,000 iterations). Data analyses were performed using Mplus 6.11 (Muthen & Muthen, 2006).

Chapter 4 - Results

Descriptive Findings

The data were initially explored with descriptive statistics related to the variables of interest and *t*-tests to determine mean differences between men and women in the sample. More detail about the descriptive statistics can be seen in Table 1. Respondents' relationship quality with parents and involvement with parents were significantly different for men and women, with relationship quality with father and involvement with father scores being significantly higher for

boys (relationship quality with father: $M = 21.54$, $SD = 3.52$ for men versus $M = 21.00$, $SD = 4.03$ for women; $t(2799) = 3.71$, $p < .001$; involvement with father: $M = 3.96$, $SD = 2.10$ for men versus $M = 3.77$, $SD = 2.06$ for women; $t\ (2800) = 2.39$, $p < .001$). Similarly, women had significantly higher scores in mother involvement and relationship quality with mothers (mother involvement: $M = 4.65$, $SD = 1.98$ for men versus $M = 5.38$, $SD = 1.95$ for women; $t\ (3856) = 11.50$, $p < .001$; relationship quality: $M = 21.81$, $SD = 3.50$ for men versus $M = 22.51$, $SD = 2.70$ for women; $t\ (3856) = 6.07$, $p < .001$). Women experienced more depression symptoms than men ($M = 2.71$, $SD = 2.71$ for men versus $M = 3.51$, $SD = 3.35$ for women; $t\ (3267) = 6.86$, $p < .001$) and men had significantly higher self-esteem than women ($M = 12.45$, $SD = 2.01$ for men, versus $M = 11.81$, $SD = 2.15$ for women; $t\ (3941) = 9.39$, $p < .001$). Finally, participants were largely satisfied with their romantic relationship ($M = 33.44$, $SD = 6.23$, *range* = 8 - 40), but no significant differences were found between men and women in their romantic relationship quality. There were significant differences between men and women in regards to target education, with women being significantly more educated than men ($M = 5.41$, $SD = 2.22$ for men versus $M = 6.02$, $SD = 2.19$ for women; $t\ (3944) = 8.63$, $p < .001$).

Confirmatory Factor Analyses

A Confirmatory Factor Analysis (CFA) was conducted to determine if the measurement model fit the data and whether the data could be measured consistently for both men and women (Figure 2). The initial CFA had fit indices indicating that the measurement model fit the data adequately, using guidelines suggested by Hu and Bentler (1999): χ^2 (376) = 1188.274; Root Mean Square Error of Approximation (RMSEA) = .033 (90% CI = .031, .035); Comparative Fit Index (CFI) = .973; Tucker-Lewis Index (TLI) = .966; Standardized Root Mean Square Residual (SRMR) = .038. Model fit indices indicated a good fit to the data, indicating that the structural model could be tested.

The correlations between variables in the proposed model can be seen in Table 2. All parent-child relationship variables were significantly associated with depression symptoms, except for mother involvement and father involvement for boys: mother knowledge (for men: $r = -.154$, $p < .001$; for women: $r = -.054$, $p < .05$), mother involvement (for men: $r = -.028$, $p = n.s.$; for women: $r = -.077$, $p < .01$), father involvement (for men: $r = -.022$, $p =$ ns; for women: $r = -.125$, $p < .001$), target relationship quality with mother (for men: $r = -.098$, $p < .01$; for women: r

= -.198, $p < .001$), target relationship quality with father (for men: $r = -.138$, $p < .001$; for women: $r = -.213$, $p < .001$), and mother's relationship quality with target (for men: $r = -.121$, $p < .001$; for women: $r = -.166$, $p < .001$). Parenting variables and self-esteem were also almost all correlated, except for mother knowledge, mother involvement, and father involvement for boys, and mother knowledge for girls: mother involvement (for men: $r = .036$, $p = n.s.$; for women: $r = .069$, $p < .01$), father involvement (for men: $r = .036$, $p = n.s.$; for women: $r = .145$, $p < .001$), target relationship quality with mother (for men: $r = .164$, $p < .001$; for women: $r = .226$, $p < .001$), target relationship quality with father (for men: $r = .146$, $p < .001$; for women: $r = .236$, $p < .001$), and mother's relationship quality with target (for men: $r = .161$, $p < .001$; for women: $r = .124$, $p < .001$). Finally, both depression and self-esteem were significantly correlated with romantic relationship quality (for men: $r = -.170$, $p < .001$, $r = .146$, $p < .001$; for women: $r = -.221$, $p < .001$. $r = .200$, $p < .001$, respectively). As the relationships between variables in the zero order correlations were in the directions hypothesized, the next step was testing the structural model.

Structural Equation Models for Men and Women

The initial model fit indices for the two-group structural model analysis indicated a less than adequate fit to the data, so the modification indices were consulted (χ^2 (626) = 2636.718; RMSEA = .040 (90% CI = .039, .042); CFI = .936; TLI = .921; SRMR = .051). The modification indices indicated that the model fit would improve if correlating the following variables: father involvement and relationship quality with father, mother involvement and relationship quality with mother, adolescent perception of relationship quality with mother and mother's perception of relationship quality with the adolescent, target relationship quality with mother and target relationship quality with father, and involvement with mother and involvement with father. These modifications were theoretically justified, as these variables are facets of parent-adolescent relationships, and are expected to be correlated. The model fit indices for the two-group structural equation analysis including the modification indices indicated an adequate fit between the model and the data: χ^2 (614) = 2304.367; RMSEA = .037 (90% CI = .036, .039); CFI = .946; TLI = .932; SRMR = .039. To determine if gender moderated the relationships of interest in this study, a second structural equation model was analyzed, with all paths constrained to be equal for men and women, and the chi-square difference between the initial model and the

constrained model were calculated. The chi-square difference indicated that constraining the paths to be equal for men and women significantly worsened the fit of the model (χ^2_{diff} (62) = 146.623, $p < .001$). This finding indicated that a two-group analysis of the model was recommended, and that gender significantly moderates the relationships between the variables of interest.

The standardized results for the structural model can be seen in Figure 3. For boys, mother knowledge and adolescent's perception of relationship quality with father at time I were significantly associated with target depression at time III (β = -.110, $p < .01$; β = -.110, $p < .05$, respectively). Using mother knowledge as an example, this can be interpreted as follows: for every one standard deviation unit increase in mother knowledge, there is a .110 standard deviation unit decrease in target depression, when controlling for all the other parenting variables, self-esteem, target age, race, mother's relationship status and mother's education. Thus, adolescent boys whose mothers are more knowledgeable about them at Time I, tend to have lower levels of depression symptoms at Time III. Similarly, adolescent boys who perceive their relationship with their fathers to be stronger at Time I are less likely to experience depression symptoms at Time III. Target perceptions of mother and father involvement, relationship quality with mothers and mothers' perception of relationship quality with target at Time I were not related to target depression symptoms at Time III for boys.

Related to self-esteem, only mother perception of relationship with target adolescent at Time I was significantly associated with target self-esteem at Time III (β = .108, $p < .01$). Therefore, when mothers perceive their relationship with their adolescent boys to be warm and caring, these boys are more likely to have higher self-esteem at Time III. Adolescent's perceptions of mothers' knowledge, mother involvement, father involvement and relationship quality with mothers and fathers were not related to target self-esteem at Time III.

Finally, self-esteem was not associated with romantic relationship quality for men, but depression had a significant, negative association with romantic relationship quality (β = -.096, $p < .05$). This means that for every one standard deviation unit increase in depression, there is a .096 standard deviation unit decrease in romantic relationship quality for men, when controlling for the influence of the other parent-child relationship variables, depression, target age, race, education, relationship status, relationship length, and target mother's education and relationship status. The model accounted for almost 7% of the variance in target depression (R^2 = .068),

approximately 5% in self-esteem (R^2 = .046), and 9% in romantic relationship quality (R^2 = .092) for males in the sample.

For women, a different picture emerged. An interesting finding for women was that mother's knowledge about the adolescent girl, and adolescent girl's perception of mother and father involvement at Time I had no association with target depression or self-esteem at Time III. However, adolescent girls' perception of their relationship with their father, adolescent girls' perception of their relationship with their mother, and their mothers' perceptions of the mother-daughter relationship were significantly associated with depression at Time III (β = -.141, p < .01; β = -.093, p < .05, β = -.090, p < .001, respectively). Adolescent girls' perception of their relationship with their mother and father at Time I were significantly associated with self-esteem at Time III (β =.142, p < .001; β = .135, p < .01, respectively). Thus, as adolescent girls perceive their relationship with their father and mother to be warm and caring and the stronger their mothers consider their daughter-mother relationship to be, the less likely these girls are to experience depression symptoms at Time III. And, as adolescent girls perceive their relationship with their fathers and mothers to be warm and caring at Time I, these girls tend to have higher self-esteem at Time III. Both target depression symptoms and self-esteem at Time III were significantly associated with romantic relationship quality at Time IV (β = -.090, p < .05; β = .108, p < .01, respectively). This means that for every one standard deviation unit increase in target depression at Time III, there is a .090 standard deviation unit decrease in romantic relationship quality at Time IV for women, when controlling for the parent-child relationship variables, self-esteem, target age, race, education, relationship length, relationship status, and mother's relationship status and education. Similarly, for every one standard deviation unit increase in self-esteem at Time III, there is a .108 standard deviation unit increase in target romantic relationship quality at Time IV, when controlling for the parent-child relationship variables, depression, target age, race, education, relationship length, relationship status, and mother's relationship status and education. Finally, adolescent girls' perception of the relationship with their mothers was significantly associated with romantic relationship quality at Time IV (β = .085, p < .05). For every one standard deviation unit increase in adolescent relationship quality with their mothers at Time I, there is a .085 standard deviation unit increase in target romantic relationship quality at Time IV, when controlling for the parent-child relationship variables, depression, self-esteem, target age, race, education, relationship length,

relationship status, and mother's relationship status and education. The model accounted for 8% of the variance in depression (R^2 = .084), 7% of the variance in self-esteem (R^2 = .074), and almost 12% of the variance in romantic relationship quality (R^2= .117) for women.

Regarding the control variables included in the model, interesting findings emerged. For boys and girls, father involvement was higher when adolescents were younger (males: β = -.092, p < .001; females: β = -.065, p < .01), and their mothers were more highly educated (males: β = .119, p < .001; females: β = .156, p < .001). For girls, being White was associated with higher father involvement (β = -.071, p < .01) and fathers were more involved with adolescent boys whose mothers were not married (β = .106, p < .05). For mother involvement, age, mothers' education, and mothers' relationship status were associated with higher involvement for boys, in that higher involvement was associated with younger boys, whose mothers were more highly educated and unmarried (β = -.049, p < .05; β = .114, p < .001; β = .100, p < .001). For girls, more highly educated mothers were more involved (β = .157, p < .001). Adolescent age was also associated with stronger relationships with mothers and fathers, as perceived by the adolescent boys and girls, with younger adolescents having stronger relationships with fathers and mothers (males: β = -.149, p < .001; β = -.140, p < .001; females: β = -.149, p < .001; β = -.130, p < .001). However, adolescent girls also perceived their relationships with fathers and mothers to be stronger when their mothers were married (β = -.158, p < .01; β = -.072, p < .01). Mothers perceived their relationship with the adolescent to be stronger with adolescent boys and girls if they were married (males: β = -.091, p < .01; β = -.106, p < .001). Finally, mother knowledge about adolescents was higher for White adolescent boys and girls, and when mothers were more highly educated (males: β = -.180, p < .001; β = .178, p < .001; females: β = -.190, p < .001; β = .174, p < .001). Married mothers also had more knowledge about their adolescent girls (β = -.066, p < .01).

Men who were White and had mothers who were more highly educated, experienced less depression at Time III (respectively, β = .107, p < .01; β = -.084, p < .01). For women, age, race, and mother education were associated with depression symptoms at Time III, with women who were White, older, and had mothers who were more highly educated at Time I experiencing fewer depression symptoms at Time III (β = .077, p < .001; β = -.107 p < .01; β = -.074, p < .01). None of the control variables were associated with men's self-esteem. For women, self-esteem was associated with race, in that women of color were more likely to experience higher self-

esteem at Time III ($\beta = .078$, $p < .001$). Further, men and women in the sample who were White, had been in a romantic relationship longer, and were married had more satisfying relationships than their counterparts in the sample (males: $\beta = -.092$, $p < .001$; $\beta = .063$, $p < .05$; $\beta = -.169$, $p < .001$; females: $\beta = -.099$, $p < .001$; $\beta = .061$, $p < .05$; $\beta = -.128$, $p < .001$).

The next step in the analysis was to constrain each path in the model to be equal for men and women, one at a time, in order to determine if the strength of the path coefficients were different between the two groups. The chi-square difference test was calculated at each time, in order to determine whether applying the constraint to the model significantly worsened the fit of the model to the data. When applying a constraint to the path coefficient between mother knowledge about target adolescent and depression ($\chi^2_{diff}(1) = 5.34$, $p < .001$), the model fit significantly worsened. This means there are significant differences between men and women in how mothers' knowledge about their adolescent children is associated with depression. More specifically, the relationship between mother knowledge and depression is stronger for men. There were no other significant differences between men and women for any of the other relationships examined here. Finally, only one of the control variables was significantly different in their relationship with mother involvement for men and for women. When applying a constraint to the path coefficients between mother relationship status and mother involvement ($\chi^2_{diff}(1) = 7.49$, $p < .001$) it significantly worsened the model. Therefore, there are significant differences between men and women in how mother relationship status is related to mother involvement. Further, the association between mother relationship status and mother involvement was stronger for women, in that female children of unmarried mothers enjoy more involvement with their mothers.

Finally, in order to examine whether depression and self-esteem mediated the association between the parent-child relationship variables and romantic relationship quality, a bootstrap test of mediation was conducted (Preacher & Hayes, 2008). Two indirect effects emerged as significant. The path from adolescent girls' perception of their relationship with mother to self-esteem to relationship quality was significant ($\beta = .015$, $p < .05$, CI = .003, .040). This means that as adolescent girls' perception of their relationship with mother increases one standard deviation unit, their romantic relationship quality increases .015 standard deviation units, through the prior effect of adolescent relationship with mother on self-esteem. A second path that emerged as significant was from adolescent girls' perception of their relationship with their

fathers to self-esteem to romantic relationship quality (β = .015, p < .05, CI = .003, .035). Thus, as adolescent girls' perception of the relationship with their fathers increase one standard deviation unit, targets' romantic relationship quality increases .015 standard deviation units, through the prior effect of adolescents' perception of the relationship with fathers on self-esteem.

Discussion

Drawing on the DEARR Model (Bryant & Conger, 2002), this study examined if parent-adolescent relationships were related to the romantic relationship quality of these adolescents as they became adults, and if these relationships were mediated by depression and self-esteem, after controlling for the effects of target age, race, education, relationship length, relationship status, adolescent mother's relationship status, and adolescent mother's education. Further, this study investigated if gender moderated the relationships between parent-adolescent relationships, depression, self-esteem, and adult romantic relationship quality. This study adds to the literature by investigating the role of fathers and mothers, the role of adolescent and parent report in assessing parent-child relationship quality, and adolescent gender differences in these relationships. Further, this study illustrates how parent-adolescent relationship processes go beyond immediate child outcomes, and contribute to the development of adolescents' successful, satisfying romantic relationships in the future.

The link between parent-adolescent relationships and future romantic relationship quality

Adolescent girls who perceived their relationship with their mother to be strong at Time I experienced higher romantic relationship quality at Time IV, as a direct effect. Direct effects have been found in the past in at least one study (Donnellan et al, 2006). This highlights the enduring impact that parent-child relationships can have on adolescents, especially as they develop intimate relationships of their own. This finding further supports existing research about the continuity of quality relationships over the life course, in that adolescents who have good relationships with their parents are more likely to have good relationships with their peers and their future romantic relationship partners (Hart-Parade et al, 2012; Simmons, Lin, & Gordon, 1998).

The link between parent-child relationships and psychological wellbeing

Other significant findings were the relationships between parent-adolescent relationship quality and depression in that adolescent girls who perceived to have stronger relationships with both mother and father, and whose mothers perceived to have a strong mother-daughter relationship at Time I, were less likely to experience depression symptoms at Time III. For men, adolescent boys who perceived having a strong relationship with their father at Time I were less likely to experience depression symptoms at Time III. Similarly, adolescent boys who had mothers who were knowledgeable about them were also less likely to experience depression symptoms at Time III. Adolescent boys who had mothers who perceived their relationship to be strong at Time I were likely to have higher self-esteem at Time III. These findings indicate that parent-adolescent relationship quality (related to both mothers and fathers) and knowledge are significant in predicting adolescent boys' and girls'psychological wellbeing as they reach young adulthood, as has been found in previous studies (Day & Padilla Walker, 2009; Dmitrieva et al, 2004; King & Sobolewski, 2006).

What makes these findings noteworthy, however, is that they count on adolescent and parent reports of relationship quality. This is an interesting and relevant contribution, given that although both parent and adolescent report have been used in several studies and the association between parent report of relationship quality with the adolescent and adolescent depression symptoms has been found in the past (Day & Padilla-Walker, 2009; Hart-Parade et al, 2012; Overbeek et al, 2007), few studies have used both as predictors for future outcomes. Additionally, previous studies have found that when comparing adolescent and parent reports, parents were likely to be more positive about relationships and to underestimate the importance of issues adolescents were facing. The difference between parent and adolescent report have been found to widen as adolescents experience more distress (Waters, Stewart-Brown, & Fitzpatrick, 2003; Sourander, Helstela, & Helenius, 1999). Given the relatively high scores in relationship quality as reported by mothers and adolescents in this study, it is likely that parents in this study were more in tune with their adolescents, making it possible for parent reports of the relationship to predict future psychological wellbeing.

Surprisingly, parent-adolescent involvement were not significantly associated with depression and self-esteem for boys and girls. These are intriguing findings, given that the association between parent-child involvement, particularly, father involvement, and children's

psychological outcomes has been investigated repeatedly in the past, with findings supporting the importance of father involvement in predicting better adolescent psychological outcomes (Cookston & Finlay, 2006; Day & Padilla-Walker, 2009). This may have been the case due to specific characteristics of this sample or measurement issues. In examining the association between control variables and involvement, age was significantly related to involvement, in that younger adolescents were associated with greater parental involvement. Additionally, scores for involvement were relatively low (mother involvement: $M = 3.82$, $SD = 2.09$, *range* = 0-11; father involvement: $M = 4.99$, $SD = 2.00$, *range* = 0-11). Given that the average age of the sample at Time I was 15 years old, it is likely that adolescents at that age were more involved with their own activities with peers than activities with their parents. Adolescents' search for autonomy and individuation commonly is associated with reductions in the amount of time parents and adolescents spend together (for a review, see Steinberg & Sheffield Morris, 2001). Thus, it is possible that adolescents do not necessarily value sharing activities with their parents as much as they may value a harmonious, close, and safe relationship as a base for the adolescent to go through the process of individuation (Steinberg & Sheffield Morris, 2001).

Another possible explanation is that the father involvement literature in particular, is heavily focused on non-residential fathers, and the impact of not having a parent present in the home. As the sample of this study was largely comprised of married mothers (72%), most adolescents in this sample lived in two parent homes, with either a father or a father figure present. Additionally, 60% of these adolescents lived with their biological fathers in the home. In that case, parent accessibility may not be as much of an issue, and therefore, involvement becomes less relevant. In this case, quality, rather than the quantity of parent-adolescent involvement may be more relevant Additionally, it is possible that the questions about parental involvement (shopping, going to church, going to the movies, etc.) did not capture the emotional investment that is associated with parental involvement and adolescents' outcomes (Mullan Harris, Furstenberg, & Marmer, 1998).

Other non-significant associations included: adolescent boys' perception of the relationship quality with their mother and depression, adolescent boys' perception of relationship quality with their mother and self-esteem, and adolescent boys' perception of relationship quality with their father and self-esteem. In order to understand these findings, it is important to note first that the moderation analyses revealed few significant differences between men and women

for these relationships. And although some of these relationships were significant for women but not for men and vice-versa, these findings should be interpreted with caution. Previous studies have found support for the association between adolescent-parent relationship quality and adolescent psychological outcomes although most studies investigate only relationship quality with mothers, or relationship quality with non-residential fathers. At least one study indicates that the association between relationship quality with mothers and adolescent wellbeing has stronger effects than relationship quality with non-residential fathers (King & Sobolewski, 2006).

Additionally, the findings for this study were based on adolescent reports of relationship quality with fathers and mothers, and most of the adolescents in the sample lived with their biological fathers (60%), while previous studies investigating father involvement commonly focused on non-resident father involvement (King & Sobolewski, 2006). It is likely that differences between the sample for this study and previous studies may have produced different outcomes. Further, scores for relationship with father and mother were high, and scores were significantly different for men and for women, with men having the highest mean scores for relationship quality with mothers and fathers (relationship quality with mothers for men: M = 22.50, SD = 2.71, for women: M = 21.88, SD = 3.51, *range* = 0-25, t (3856) = 6.07; relationship quality with fathers for men: M = 21.53, SD = 3.51; for women: M = 21.00, SD = 4.04, *range* = 0-25, t (2799) = 3.71). There was more missing data for questions related to relationships with fathers *(*n = 2,801) than for questions regarding relationships with mothers (n = 3,858). Thus, it is possible that previous studies found different results due to their focus on parents in general, or specifically on residential fathers, or that the sample for this study was too homogeneous regarding relationship quality with parents to test these relationships. These associations need to be further investigated in order to clarify these relationships.

The link between psychological wellbeing and romantic relationship quality

Young women and men who experienced fewer depression symptoms at Time III had better relationship quality with a romantic partner at Time IV, and young women who experienced higher self-esteem at Time III were more likely to have higher romantic relationship quality at Time IV. Depression and self-esteem have been found to be associated with romantic relationship quality in the past (Beach & O'Leary, 1993; Fincham et al, 1997; Murray, 2006;

Ulrich-Jabukowski, Russell, & O'Hara, 1988). These findings, using a more heterogeneous sample, contribute to the literature providing further support for the part of the DEARR Model tested here (Bryant & Conger, 2002) and for the continuity of relationship quality from early parent-adolescent relationship quality to later young adult romantic relationship quality (Hart-Parade et al, 2012; Simmons, Lin, & Gordon, 1998).

Mediation Analyses

An interesting finding was that self-esteem partially mediated the association between adolescent girls' relationship quality with mothers at Time I and romantic relationship quality at Time IV, and self-esteem fully mediated the relationship between adolescent girls' relationship quality with fathers at Time I and romantic relationship quality at Time IV. Specifically, adolescent girls who perceived to have a strong relationship with their mother and father at Time I had higher romantic relationship quality at Time IV, through the effect of self-esteem at Time III. This is an interesting addition to the current literature, as previous investigations of these relationships have commonly focused on family and romantic relationship processes as mediators (Conger et al, 2000; Hart-Parade et al, 2012; Overbeek et al, 2007). More importantly, this finding has potential clinical implications, in that it highlights possibilities for interventions with young women who experienced poor parent-adolescent relationship quality. Self-esteem is not a static individual attribute, and can be improved with the use of therapeutic interventions (Haney & Durlak, 1998).

Depression did not mediate the relationship between parent-child relationship processes and romantic relationship quality for men or women. This is a surprising finding given previous studies that have consistently found depression to be associated with negative parent-child interactions and poorer romantic relationship quality (Beach & O'Leary, 1993; Dmitrieva et al, 2004; Engert et al, 2011). Although the standardized path coefficient between target depression and romantic relationship quality was significant for males, it was very small (β = -.096, $p < .05$), and there were no significant differences between men and women when empirically testing the difference between these relationships. It is also important to note that this sample consisted of generally highly satisfied individuals (M = 33.44, SD = 6.23, *range* = 8-40), with low depression scores (M = 3.18, SD = 3.13, *range* = 0-20). This might be one of the reasons why this relationship was not significant, and a more heterogeneous sample with respect to depression

symptoms and relationship quality may be needed to test these relationships. Finally, self-esteem did not mediate the association between parent-adolescent relationships and romantic relationship quality for men. The sample for this study had relatively high self-esteem scores, and the men in the sample had significantly higher self-esteem scores than women. It is possible that there was not enough variability in the sample to investigate these relationships more accurately. Additionally, other mediators could be more adequate to investigate the association between parent-adolescent relationships and romantic relationship quality, such as young adult personality, relationship attributions, or attachment (Bowlby, 1973; Donellan et al, 2005; Sumer & Cozzarelli, 2004)

Moderation Analyses

Gender was a significant moderator of two of the relationships examined in this study. Mother knowledge about the adolescent and depression had stronger effects for men than for women. Survey questions regarding mothers' knowledge about their adolescents included questions regarding the adolescents' best friend, whether the mother had met the best friends' parents in person, and whether the mother had met the adolescents' girlfriend or boyfriend in person. Thus, men were less likely to experience depression symptoms if their mothers were knowledgeable about important aspects of their lives when they were adolescents. Mother knowledge has an element of monitoring, in that knowing adolescents' friends and their parents as well as adolescents' romantic partners provides parents with important information about adolescents' whereabouts and their activities. It is possible that gender differences may affect this relationship, in that boys are subject to relatively less monitoring than girls, but girls tend to disclose more to parents than boys (Kerr, Stattin, & Burk, 2010). Lower parental monitoring is associated with a variety of unfavorable outcomes for boys, such as delinquency, low academic performance, and substance use (Jacobson & Crockett, 2010). Thus, it is likely that adolescent boys who are less monitored have poorer academic performance and more delinquent behaviors, increasing the adolescent risk for depression symptoms as an adult. Additionally, adolescent girls enjoyed more involvement with their unmarried mothers. This is an interesting finding, and it is possible that there are stronger connections between women especially between single mothers or divorced mothers and their daughters. This has been documented in the past in qualitative studies, suggesting intergenerational loyalty between grandmothers, mothers, and

granddaughters (Bianchi, 2006) or increased closeness between mothers and daughters after divorce (Arditti, 1999).

Controls

Regarding the controls, a few associations were noteworthy. First, younger adolescents were more likely to have better relationship quality with mothers and fathers and to report more involvement with fathers, and this finding was consistent for both men and women. This finding is consistent with theory and empirical evidence regarding adolescent development in that as adolescents grow older, they tend to seek their own interests, trying to establish an identity separate from family. It is also a time of increased conflict between adolescent and parents, and perhaps lower quality relationships between adolescent and parents (Steinberg & Sheffield-Morris, 2001). Involvement with mothers for girls was significantly associated with mother education, in that mothers who were more highly educated were more involved with their daughters. Additionally, higher father involvement was associated with White adolescent girls, younger adolescent girls, and adolescent girls whose mothers were highly educated. For boys, race did not matter, but age, mothers' education and relationship status did, with younger boys, boys whose mothers were more highly educated, and boys whose mothers were unmarried being more involved with their fathers. Fathers have been found to spend more time with their sons than daughters, and girls spend more time with their fathers if they have male siblings (Raley & Bianchi, 2006). Additionally, at least one study (King, Mullan Harris, & Heard, 2004) found that although African American boys tend to spend more time with their fathers than girls, African American girls are as involved and close to their fathers as White, Hispanic and Asian boys.

Mother knowledge about adolescent boys and girls was higher for White adolescents whose mothers were more highly educated. Mother knowledge was also higher for adolescent girls whose mothers were married. Adolescents who experienced depression symptoms tended to be non-White and had mothers who were less educated. Adolescent self-esteem was only associated with race for girls, with women of color experiencing higher self-esteem. It is likely that socioeconomic conditions are relevant in understanding adolescent girls' depression in this sample, as socioeconomic factors have been found to be associated with psychological distress of adolescents (Belle & Doucet, 2003). Additionally, the association between race and self-esteem for women has been studied previously, and findings have generally supported lower self-esteem

for women of color, but there are differences based on social class (Thompson & Keith, 2001). These findings indicate the need to further investigate the association between family of origin relationships, individual attributes, and romantic relationship quality and differences between racial groups.

Finally, relationship satisfaction was associated with race, relationship length and relationship status, with men and women who were White, who had been in a relationship longer, and who were married experiencing better quality relationships. These findings are largely consistent with extant literature (Bumpass et al, 1991; Stanley et al, 2006; Ross & Van Willigen, 1997), except for the association between relationship length and relationship quality. It is likely that the sample characteristics may have influenced this result. Most of the targets were not married, and therefore, a longer relationship could mean more commitment for targets in this study.

These findings represent a relevant contribution to the literature in several ways. First, these results provide further support to the part of the DEARR model tested in this study (Bryant & Conger, 2002) in that pre-relationship factors such as family of origin relationships, and individual attributes such as self-esteem, are associated with future relationship outcomes. Second, using a more diverse sample, these findings are consistent with the extant literature providing further support of the relevance of parent-adolescent relationship quality to young adults' psychological wellbeing (Dmitrieva et al, 2004; King & Sobolewski, 2006), as well as the relevance of parent-adolescent relationship quality to young adult romantic relationship outcomes (Conger et al, 2002; Dinero et al, 2011; Hart-Parade et al, 2012). Third, adolescents' perception of the relationship quality with their mothers was directly associated with romantic relationship quality for women, despite a 12-year time difference between data collection time points.

Clinical Implications

The findings of this study are relevant to clinical practice and parent education. Adolescence is commonly a phase of life where parents and adolescents experience changes in their relationships, which are often seen by families as a turbulent time. It is a time when it may be harder for parents to connect, monitor, establish limits, and find a balance between giving the adolescent space and remaining engaged. The findings of this study indicate that enhancing

relationships between parents and adolescents is crucial not only for immediate adolescent outcomes, such as internalizing and externalizing behaviors, but also may have an impact on adolescents' future. Both parent education and family therapy should highlight these long-term outcomes to parents. Marriage and family therapists have an important role in assisting families in remaining engaged, increasing their tolerance to frustration, and understanding the potential benefits of their commitment to parenting in the wellbeing of children. Additionally, self-esteem is a potential way of intervening with young women who experienced lower quality relationships with their parents during adolescence. Successful psychotherapeutic interventions to enhance young women's self-esteem can potentially enhance their ability to establish and maintain romantic relationships in the future. And given that parents' relationships with their children serve as templates for their children's future relationships (Amato & Booth, 2001; Sassler et al, 2009) it is possible that enhancing young women's self-esteem and future relationship quality may initiate a pattern of flourishing relationships to be passed down to future generations.

Limitations and future research

This study is not without limitations. First, most of the variables of interest were not empirically validated measures of each of the constructs intended to be measured here. This is a common limitation of studies using national datasets, which are extremely helpful in their heterogeneous and large samples, but are commonly limited in measurement. Second, a relatively small amount of the variance of relationship satisfaction could be explained, indicating that there are other variables that could be relevant in explaining these relationships. Third, this study did not include some of the variables that have often been present in studies of the impact of parent-child relationships and future romantic relationship quality, such as family and romantic relationship processes. Many of the relationship processes that would have been relevant to investigate as potential mediators in this study were also measured at Time IV, the same time period the relationship outcomes were measured, and therefore, were not viable as mediators. Fourth, this study was limited to mothers' perceptions of their relationship with the adolescent. It would have been helpful to have information related to fathers' perceptions of their relationship with the adolescent and draw comparisons between the two. Finally, this study is limited given the homogeneity of the sample on several variables in the model. The sample was

made up of individuals who were highly satisfied in their romantic relationships and had a low occurrence of depression symptoms. This may have led to weaker relationships in the model.

Despite the limitations of this study, it has several strengths. Particularly, this study's main strength is the use of a national dataset, with a longitudinal design, following targets for over a decade. Typically, studies focused on the association between parent-adolescent relationships and future romantic relationship outcomes have used fairly homogeneous samples in regards to race (Conger et al, 2000; Dinero et al, 2011; Donellan et al, 2005). These studies have been instrumental in adding novel findings to the literature, but it is important to replicate those findings with more heterogeneous samples such as this. The focus on individual attributes such as self-esteem and depression as potential mediators is another strength of this study, given that previous studies have focused on parent-adolescent or romantic partners' relationship processes as mediators. Most importantly, the finding that self-esteem mediates the association between parent-adolescent relationship quality and romantic relationship quality for women provides professionals with an opportunity to effectively intervene on the individual level, and possibly change relationship outcomes. Finally, this study focused on the separate contributions of mothers and fathers and their involvement and relationship quality with adolescents, and differences in target outcomes by gender. Studies often investigate the relevance of one parent's relationship in adolescent outcomes, and few investigate these relationships in regards to gender differences.

Future studies should continue examining the relevance of parent-child relationship processes and future romantic relationship processes, in order to further clarify these relationships. Particularly, it will be important to investigate other relevant mediators of these relationships, such as personality, attributions, attachment, and other relationship variables such as confidence or commitment (Bowlby, 1973; Sumer & Cozzarelli, 2004; Whitton, Rhoades, Stanley, & Markman, 2008). Including more relationship processes to the model may better capture the complexity of these relationships. The lack of association between parental involvement, psychological wellbeing and romantic relationship quality was likely related to the sample age. Future studies should investigate whether and how age moderates these relationships, as age was negatively associated with involvement for boys and girls. It is likely that parent involvement is more relevant for pre-teens and relationship quality with parents is more relevant for late teens.

Future studies should also investigate the relevance of other potential moderators of these relationships, particularly, race and economic pressure. Given that some of the variables in this study had strong associations with race, the next step would be to investigate these relationships in light of racial differences. Finally, exploring how economic pressure moderates these relationships would be a potential future step, as the impact of economic pressure has been shown to be relevant in parent-child relationship processes, mental health, and relationship outcomes (Belle & Doucet, 2003; Conger & Conger, 2002; Conger et al, 1992; Conger et al, 1993; Whitbeck et al, 1991; Conger, Ge, Lorenz, & Simmons, 1994; Hoffman & Duncan, 1995).

Conclusion

This study investigated the importance of family of origin relationships in predicting the romantic relationship quality of young adults. Specifically, findings support the importance of parent-adolescent relationship quality in predicting young adult psychological wellbeing, namely, depression and self-esteem, and romantic relationship quality. Although adolescence may be a time of greater distance and conflict between parents and adolescents, the findings of this study support the importance of parents' relationships with their adolescents, in that boys and girls benefit from relationships with parents that are warm, caring, and knowledgeable about them. These relationships are likely to be a base for adolescents to develop into young adults with higher self-esteem and lower depression symptoms. Parent-adolescent relationships can possibly be the foundation for strong romantic relationships in the future, and generate a legacy of flourishing relationships.

References

Amato, P. (1996). Explaining the intergenerational transmission of divorce. *Journal of Marriage and Family,* 58: 628-640.

Amato, P.R., & Booth, A. (1991). Consequences of parental divorce and marital unhappiness for adult well-being. *Social Forces*, 69, 895-914.

Amato, P. R., Buhler-Kane, J., & Spencer L. J. (2011). Reconsidering "the good divorce." *Family Relations,* 60, 511-524.

Bandura, A. (1977). *Social Learning Theory*. New York: General Learning Press.

Beach, S. R. H. & O'Leary, K. D. (1993). Marital discord and dysphoria: For whom does the marital relationship predict depression symptomatology? *Journal of Social and Personal Relationships*, 10, 405-420.

Belle, D., & Doucet, J. (2003). Poverty, inequality, and discrimination as sources of depression among U.S. women. *Psychology of Women Quarterly*, 27, 101-113.

Belsky, J., & Isabella, R. A. (1985). Marital and parent- child relationships in family of origin and marital change following the birth of a baby: A retrospective analysis. *Child Development,* 56, 342-349.

Biblarz, T.J., & Stacey, J. (2010). How does gender of parents matter? *Journal of Marriage and Family,* 72, 3-22.

Bowlby, J. (1969), *Attachment and loss, Vol. 1: Attachment.* New York: Basic Books.

Bryant, C.M., & Conger, R.D. (2002). An intergenerational model of romantic relationship development (pp.57-82). In *Stability and Change in Relationships: Advances in personal relationships.* Anita L. Vangelisti, Harry Reis, & Mary-Anne Fitzpatrick (Eds.). New York: Cambridge University Press.

Bumpass, L.L., Castro Martin, T., & Sweet, J.A. (1991). The impact of family background and early marital factors on marital disruption. *Journal of Family Issues,* 12, 22-42.

Conger, R., Conger, K., Elder, G., Lorenz, F., Simons, R., & Whitbeck, L. (1993). Family economic status and adjustment of early adolescent girls. *Developmental Psychology, 29*, 206-219.

Conger, R., Conger, K., Elder Jr., G., Lorenz, F. Simons, R., & Whitbeck, L. (1992). A family process model of economic hardship and adjustment of early adolescent boys. *Child Development, 63*, pp. 526-541.

Conger, R. D., Cui, M., Bryant, C. M., & Elder, G. H. Jr. (2000). Competence in early adult romantic relationships: A developmental perspective on family influences. *Journal of Personality and Social Psychology*, 79, 224-237.

Conger, R. D., Ge, X., Elder,G. H., Lorenz, F. O., & Simons. (1994). Economic stress, coercive family process, and developmental problems of adolescents. *Child Development, 65,* 541-561.

Conger, R.D., Schofield, T.J., & Neppl,T.K. (2012). Intergenerational continuity and discontinuity in harsh parenting. *Parenting: Science and Practice,* 12, 222-231.

Cookston, J. T. & Finlay, A. K. (2006). Paternal involvement and adolescent adjustment: Longitudinal findings from Add Health. *Fathering: A Journal of Theory, Research, and Practice About Men as Fathers*, *4*, 137-158.

Cui, M., Durtschi, J.A., Donnellan, M.B., Lorenz, F.O., & Conger, R.D. (2010). Intergenerational transmission of relationship aggression: A prospective longitudinal study. *Journal of Family Psychology,* 24, 688-697.

Cui, M., & Fincham, F. D. (2010). The differential effects of parental divorce and marital conflict on young adult romantic relationships. Personal Relationships, 17, 331-343.

Cui, M., Fincham, F. D., & Pasley, B. K. (2008).Young adult romantic relationships: The role of parents' marital problems and relationship efficacy. *Personality and Social Psychology Bulletin*, 34, 1226-1235.

Day, R. D., & Padilla-Walker, L. M. (2009). Mother and father connectedness and involvement during early adolescence. *Journal of Family Psychology, 23,* 900-904.

Davila, J., Bradbury, T. N., Cohan, C. L., & Tochluk, S. (1997). Marital functioning and depression symptoms: Evidence for a stress generation model. *Journal of Personality and Social Psychology*, 73, 849-861.

Davila, J., Karney, B.R., Hall, T.W., & Bradbury, T.N. (2003). Depression symptoms and marital satisfaction: within-subject associations and the moderating effects of gender and neuroticism. *Journal of Family Psychology,* 17, 557-570.

Dinero, R. E., Conger, R. D., Shaver, P. R., Widaman, K. F., & Larsen-Rife, D. (2008). Influence of family of origin and adult romantic partners on romantic attachment security. *Journal of Family Psychology,* 22, 622-632.

Donnellan, M.B., Larsen-Life, D., & Conger, R. (2005). Personality, family history, and competence in early adult romantic relationships. *Journal of Personality and Social Psychology,* 88, 562-576.

Dmitrieva, J., Chen, C., Greenberger, E., & Gil-Rivas, V. (2004). Family relationships and adolescent psychosocial outcomes: Converging findings from Eastern and Western cultures. *Journal of Research on Adolescence*, 14, 425-447.

Elder, G.H., Eccles, J.S., Ardelt, M., & Lord, S. (1995). Inner-city parents under economic pressure: Perspectives on the strategies of parenting. *Journal of Marriage and the Family,* 57, 771-784.

Elder, G.H., Nguyen, T. & Caspi, A. (1985), "Linking family hardship to children's lives", *Child Development*, 56, 361-375.

Engert, V., Efanov, S. I., Dedovic, K., Dagher, A., & Pruessner, J. C. (2011). Increased cortisol awakening response and afternoon/evening cortisol output in healthy young adults with low early life parental care. *Psychopharmacology*, 241, 261-268.

Erol, R. Y., & Orth, U. (2013). Actor and partner effects of self-esteem on relationship satisfaction and the mediating role of secure attachment between the partners. *Journal of Research in Personality,* 47, 26-35.

Feng, D., Giarrusso, R., Bengston, V. L., & Frye, N. (1999). Intergenerational transmission of marital quality and marital instability. *Journal of Marriage and the Family*, 61, 451-463.

Fincham, F. D., Beach, S. R. H., Harold, G. T., & Osborne, L. N. (1997). Marital satisfaction and depression: Different causal relationships for men and women? *Psychological Science, 8,* 351–357.

Floury, E., & Buchanan, A. (2003). The role of father involvement in children's later mental health. *Journal of Adolescence,* 26, 63-78.

Fox, R.A., Platz, D.L., & Bentley, K.S. (1995). Maternal factors related to parenting practices, developmental expectations, and perceptions of child behavior problems. *Journal of Genetic Psychology,* 156, 431-441.

Gabriel, B., Beach, S.R.H., & Bodenmann, G. (2010). Depression, marital satisfaction, and communication in couples: investigating gender differences. *Behavior Therapy,* 41, 306-316.

Gunnar, M.R., & Donzella, B. (2002). Social regulation of the cortisol levels in early human development. *Psychoendocrinology,* 27, 199-220.

Haney, P., & Durlak, J.A. (1998). Changing self-esteem in children and adolescents: A meta-analytic review. *Journal of Personality and Social Psychology,* 79, 1022-1038.

Hawkins, D.N., & Booth, A. (2005). Unhappily ever after: Effects of long-term, low-quality marriages on well-being. *Social Forces,* 64, 446-465.

Hart Parade, S.P, Supple, A.J, & Helms, H.M. (2012). Parenting during childhood predicts relationship satisfaction in young adulthood: A prospective longitudinal perspective. *Marriage and Family Review,* 48, 150-169.

Harvey Winfield. A. (2009). Racializing the glass escalator: Reconsidering men's experiences with women's work. *Gender & Society,* 23, 5-26.

Hill Collins, P. (1986). Learning from the outsider within: The sociological significance of Black Feminist Thought. *Social Problems,* 33, 14-32.

Hoffman, S.D., & Duncan, G.J. (1988). What are the economic consequences of divorce? *Demography* 25: 641-645.

Hu, L., & Bentler, P.M. (1998). Fit indices in covariance structure modeling: sensitivity to underparametrized model misspecification. *Psychological Methods,* 3, 424-453.

Jacobson, K.C., & Crockett, L.J. (2000). Parental monitoring and adolescent adjustment: An ecological perspective. *Journal of Research on Adolescence,* 10, 65-97.

Kerr, M., Stattin, H., & Burk, W.J. (2010). A reinterpretation of parental monitoring in longitudinal perspective. *Journal of Research on Adolescence,* 20, 39-64.

King, V., & Sobolewski, J.M. (2006). Nonresident fathers' contributions to adolescent well-being. *Journal of Marriage and Family*, 68, 537-557.

King, V., Mullan Harris, K., & Heard, M. (2004). Racial and ethnic diversity in nonresident father involvement. *Journal of Marriage and the Family,* 66, 1-21.

Kline, R.B. (2010). *Principles and practice of structural equation modeling.* New York: Guilford Press.

Kling, K.C., Hyde, J.S., Showers, C.J., & Buswell, B.N. (1999). Gender differences in self-esteem: A meta-analysis. *Psychological Bulletin,* 125, 470-500.

Kwong, M., Bartholomew, K., Henderson, A.J.Z., & Trinke, S. (2003). The intergenerational transmission of relationship violence. *Journal of Family Psychology, 17,* 288-301.

Little, T.D., Cunningham, W.A., & Shahar, G. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling,* 9, 152-173.

Lundberg, S., McLanahan, S., & Rose, E. (2007). Child gender and father involvement in fragile families. *Demography,* 44, 79-92.

Mammen, K. (2005). Fathers' time investments in children: Do sons get more? *Journal of Population Economics,* 24, 839-871.

Mullan Harris, Furstenberg,F.F., & K., Marmer, J.K.(1998). Paternal involvement with adolescents in intact families: The influence of fathers over the life course. *Demography,* 35, 201-216.

Murray, L. (2006). Self-esteem: Its relational contingencies and consequences. In M.H. Kernis (Ed.) *Self-esteem issues and answers: A sourcebook of current perspectives* (pp. 350-358). New York: Psychology Press.

Murray, S. L., Derrick, J. L., Leder, S., & Holmes, J. G. (2008). Balancing connectedness and self-protection goals in close relationships: A levels-of-processing perspective on risk regulation. *Journal of Personality and Social Psychology, 94,* 429–459.

Muthén, L.K. and Muthén, B.O. (2006), *Mplus*, Los Angeles: Muthén and Muthén.

Overbeek, G., Stattin, H., Vermulst, A., Ha, T., Engels, R.C.M.E. (2007). Parent-child relationships, partner relationships, and emotional adjustment: A birth-to-maturity prospective study. *Developmental Psychology,* 43, 429-437.

Poyner-Del Vento, P. W., & Cobb, R. J. (2011). The association between depression symptoms and marital satisfaction and the moderating role of chronic stress. *Journal of Social and Clinical Psychology, 30,* 905-936.

Preacher, K . J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. Behavior Research Methods, 40, 879-891.

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

Raley, S., & Bianchi, S. (2006). Sons, daughters, and family processes: Does gender of children matter? *Annual Review of Sociology,* 32, 401-421.

Risman, B.J., & Myers, K. (1997). As the twig is bent: Children reared in feminist households. *Qualitative Sociology,* 20, 229-252.

Robinson, K.J., & Cameron, J.J. (2012). Self-esteem is a shared relationship resource: Additive effects of partners' self-esteem levels predict relationship quality. *Journal of Research in Personality,* 46, 227-230.

Roebuck Bulanda, J., & Brown, S.L. (2007). Race-ethnic differences in marital quality and divorce. *Social Science Research,* 36, 945-967.

Ross, C.E., & Van Willigen, M. (1997). Education and the subjective quality of life. *Journal of Health and Social Behavior,* 38, 275-297.

Sassler, S., Cunningham, A., & Lichter, D.T. (2009). Intergenerational patterns of union formation and relationship quality. *Journal of Family Issues,* 30, 757-786.

Simons, R.L., Lin, K., & Gordon, L.C. (1998). Socialization in the family or origin and male dating violence: A prospective study. *Journal of Marriage and Family,* 61, 1020-1033.

Sourander, A., Helstela, L., & Helenius, H. (1999). Parent-adolescent agreement on emotional and behavioral problems. *Social Psychiatry and Psychiatric Epidemiology,* 34, 657-663.

Stanley, S.M., Rhoades, G.K., & Markman, H.J. (2006). Sliding versus deciding: Inertia and the premarital cohabitation effect. *Family Relations,* 55, 499-509.

Steinberg, L., & Sheffield Morris, A. (2001). Adolescent Development. *Annual Review of Psychology,* 52, 83-110.

Steinberg., L., & Silk, J.S. (2002). Parenting adolescents. In M.H. Bornstein (Ed.), *Handbook of parenting: Vol. 1: Children and Parenting (*2nd ed., pp.103-133). Mahwah, NJ: Lawrence Erlbaum Associates.

Sumer, N., & Cozzarelli, C. (2004). The impact of adult attachment on partner self-atrributions and relationship quality. *Personal relationships,* 11, 355-371.

Thompson, M.S., & Keith, V.M. (2001). The Blacker the berry: Gender, skin tone, self-esteem, and self-efficacy. *Gender and Society,* 15, 336-357.

Ulrich-Jakubowski, D., Russell, D. W., & O'Hara, M. W. (1988). Marital adjustment difficulties: Cause or consequence of depression symptomatology. *Journal of Social and Clinical Psychology*, 7, 312-318.

Waters, E., Stewart-Brown, S., & Fitzpatrick, R. (2003). Agreement between adolescent self-report and parent reports of health and wellbeing: Results of an epidemiological study. *Child: Care, Health, and Development,* 29, 501-509.

Weissman, M.M. (1987). Advances in psychiatric epidemiology: rates and risk for major depression. *American Journal of Public Health,* 77, 445-451.

Whitbeck, L.B., Hoyt, D.R., Simons, R.L., & Conger, R.D. (1992). Intergenerational continuity of parental rejection and depressed affect. *Journal of Personality and Social Psychology,* 63, 1036-1045.

Whitton, S.W., & Kuryluk, A.D. (2012). Relationship satisfaction and depression symptoms in emerging adults: cross-sectional associations and moderating effects of relationship characteristics. *Journal of Family Psychology,* 26, 226-235.

Whitton, S.W., Rhoades, G.K., Stanley, S.M., & Markman, H.J. (2008). Effects of parental divorce on marital commitment and confidence. *Journal of Family Psychology,* 22, 789-793.

Whitton, S. W., & Whisman, M. A**.** (2010). Relationship satisfaction instability and depression. *Journal of Family Psychology, 24,* 791-794.

Whisman, M.A., & Uebelacker, L.A. (2009). Prospective associations between marital discord and depression symptoms in middle-aged and older adults. *Psychology and Aging,* 24, 184-189.

Wickrama, K. A. S., Lorenz, F. O., Conger, R. D., & Elder, G. H., Jr.(1997). Marital quality and physical illness: A latent growth curve analysis. *Journal of Marriage and the Family*, *59*, 143–155.

Whitbeck, L.B., Simmons, R.L., Conger, R.D., Lorenz, F.O., Huck, S., & Elder, G.H, Jr. (1992). Family economic hardship, parental support, and adolescent self-esteem. *Social Psychology Quarterly,* 54, 353-363.

Zeigler-Hill, V., Fulton, J. J., & McLemore, C. (2011). The role of unstable self-esteem in the appraisal of romantic relationships. *Personality and Individual Differences*, 51, 51-56.

Appendix A - Tables

Table A.1. Descriptive statistics (n = 3,946)

Measures		*M* (or *n*)	*SD*	*Range*
Mother knowledge (1994-1995)		2.68	.71	0-3
Father involvement (1994-1995)		3.82	2.09	0-11
Mother involvement (1994-1995)		4.99	2.00	0-11
Target relationship quality with their mother (1994-1995)		22.19	3.16	5-25
Target relationship quality with their father (1994-1995)		21.26	3.78	5-25
Mother perception of relationship quality with target (1994-1995)		19.39	2.07	5-25
Depression (2001-2002)		3.18	3.13	0-20
Self-esteem (2001-2002)		12.13	2.09	3-15
Romantic Relationship Quality (2007-2008)		33.44	6.23	8-40
Target age (1994-1995)		15.42	1.75	11-21
Target gender *(n*)	Male	1,748		
	Female	2,198		
Target race (*n*)	White	2,762		
	Other	1,176		
Target education		5.73	2.23	1-13
Target rx status (n)	Married	1,763		
	Other	2,183		
Target relationship length (in months)		58	47.97	0-228
Mother's rx status (*n*)	Married	2,847		
	Other	1,089		
Mother education		5.66	2.31	1-10

Table A.2. Correlations (men above and women below diagonal)

	1	2	3	4	5	6	7	8	9
1.Motherknow	_	.064**	.062*	.051*	.111***	.137***	-.154***	.060	.060*
2.M. involv.	.078***	_	.667***	.193***	.101***	.104***	-.028	.036	.050*
3. F. involv.	.124***	.534***	_	.146***	.314***	.128***	-.022	.036	.024
4. Trxmother	.035	.277***	.214***	_	.568***	.358***	-.098**	.164***	.088***
5. Trxfather	.100***	.112***	.421***	.523***	_	.263***	-.138***	.146***	.065*
6. Motherrxt	.068**	.151***	.137***	.451***	.309***	_	-.121***	.161***	.094**
7. Depression	-.054*	-.077**	-.125***	-.198***	-.213***	-.166***	_	-.464***	-.170***
8. Self-esteem	.014	.069**	.145***	.226***	.236***	.124***	-.553***	_	.146***
9. Trxqual	.076***	.083**	.065**	.195***	.174***	.124***	-.221***	.200***	_

Note: Mother know (mother's knowledge about target adolescent); Mother involv. (mother's involvement with target adolescent); Father involv. (Father's involvement with target adolescent), Motherrxt (Mother's perception of relationship with target adolescent); Trxqual (Target romantic relationship quality). ***$p < .001$, **$p < .01$, *$p < .05$.

Table A.3. Mediating effects for parent-child relationships as independent variables, depression and self-esteem as mediating variables, and romantic relationship quality as the outcome variable. Bootstrap analyses for the magnitude and significance of mediating pathways

Group	Predictor		Mediator (s)		Outcome	β	CI	*t*-value
Men	Trxfather	→	Depression	→	Rel. Quality	.01	.00, .03	1.41
Men	Motherxt	→	Depression	→	Rel. Quality	.01	.00, .03	1.37
Men	Motherxt	→	Self-esteem	→	Rel. Quality	.01	.00, .03	1.39
Men	Motherknow	→	Depression	→	Rel. Quality	.01	.00, .03	1.69
Women	Trxmother	→	Depression	→	Rel. Quality	.01	.00, .02	1.46
Women	Trxmother	→	Self-esteem	→	Rel. Quality	.02	.00, .04	2.05*
Women	Trxfather	→	Depression	→	Rel. Quality	.01	.00, .03	1.69
Women	Trxfather	→	Self-esteem	→	Rel. Quality	.02	.00, .04	1.91*
Women	Inv. father	→	Self-esteem	→	Rel. Quality	01	.00, .03	1.39
Women	Motherrxt	→	Depression	→	Rel. Quality	.01	.00, .03	1.65

Note: Indirect paths tested with 2,000 bootstraps. CI=95% confidence interval.

*$p < .05$.

Appendix B - Figures

Figure B.1. Theoretical framework

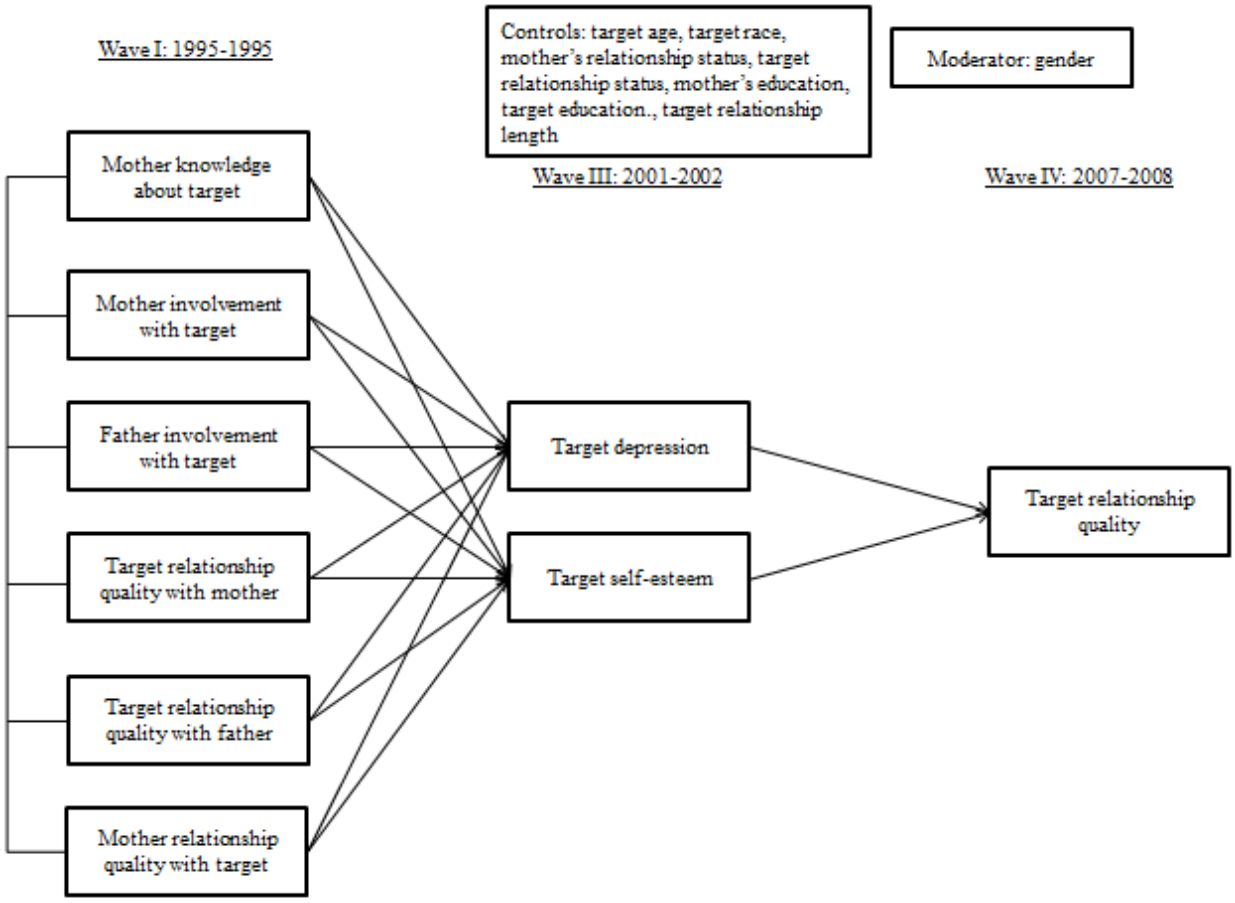
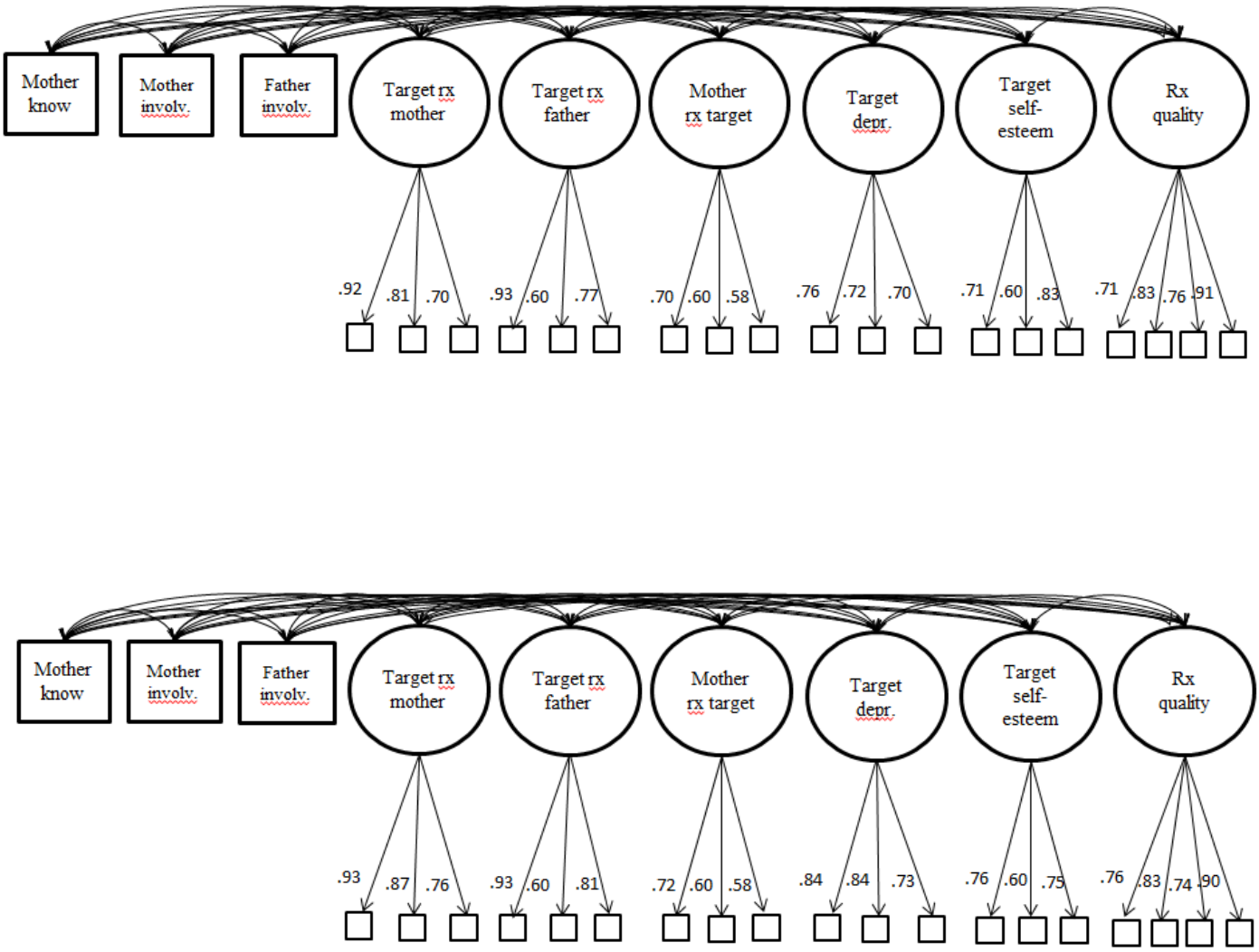
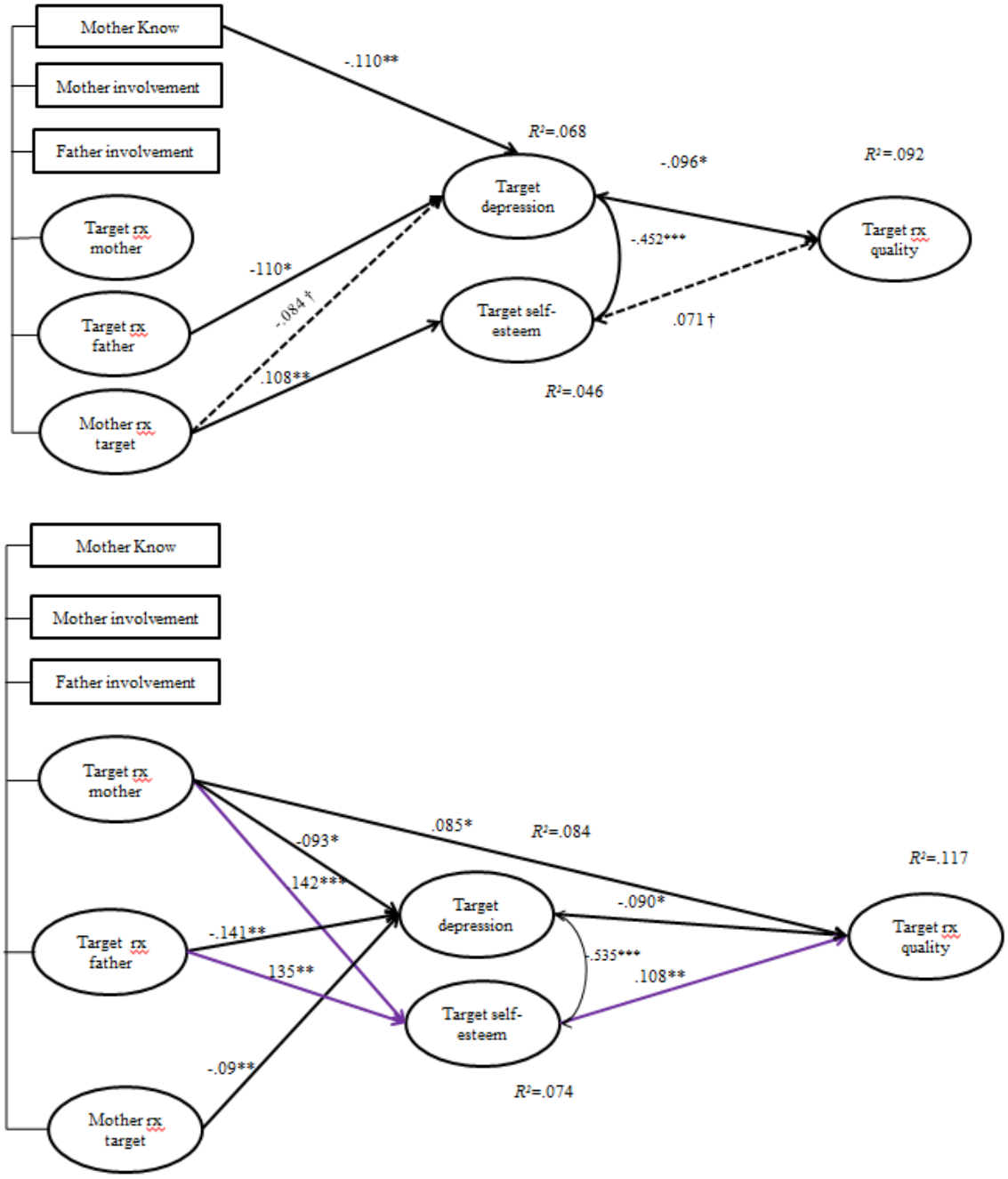


Figure B.2. Confirmatory Factor Analysis of Measurement Model (Model for Men Above and Model for Women below; Standardized Estimates Shown ; N = 3,946)



Note: Model Fit Indices: χ^2 (376) = 1188.274; Root Mean Square Error of Approximation (RMSEA) = .033 (90% CI = .031, .035); Comparative Fit Index (CFI) = .973; Tucker-Lewis Index (TLI) = .966; Standardized Root Mean Square Residual (SRMR) = .038.

Figure B.3. Full Structural Model Estimating the Impact of Parent-Child Relationship Processes on Adult Romantic Relationship Quality for Men and Women (Model for Men Above and Model for Women Below; Standardized Estimates Shown; N = 3,946)



Note: Model Fit Indices χ^2 (614) = 2304.367; RMSEA = .037 (90% CI = .036, .039); CFI = .946; TLI = .932; SRMR = .039. Model estimated with 2,000 bootstraps.