

ADOLESCENT ROMANTIC RELATIONSHIPS: COMFORT WITH INTIMACY,  
PARENTAL WARMTH AND SUPPORT, AND EXPLORATION OF DATING  
PARTNER IDENTITY

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ADOLESCENT ROMANTIC RELATIONSHIPS: COMFORT WITH INTIMACY,  
PARENTAL WARMTH AND SUPPORT, AND EXPLORATION OF  
DATING PARTNER IDENTITY

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## VITA

Janet Ruth (Bowles) Soto, daughter of Mary Willette Vogh Bowles, was born on July 19, 1985 in Concord, North Carolina. She graduated as Valedictorian of Oak Mountain High School in 2003. She entered Auburn University in August, 2003, and graduated *summa cum laude* with a Bachelor of Science degree in Human Development and Family Studies in May, 2007. She entered Graduate School at Auburn University in August, 2007, and worked as a graduate research assistant and project manager with the Healthy Couples, Healthy Children: Targeting Youth project. She married Chris Anthony Soto, son of Ricardo and Patsy (Moran) Soto, on August 2, 2008. She graduated *summa cum laude* with a Master of Science degree in Human Development and Family Studies in August, 2009.

THESIS ABSTRACT

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DATING PARTNER IDENTITY

Janet Ruth Soto

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Adolescent romantic relationships may have a significant and long-lasting impact on important developmental processes and outcomes. The goal of this study was to examine how parental warmth/ support and comfort with intimacy in romantic relationships are related to exploration of the dating partner identity during adolescence. Other factors known to influence identity and intimacy development during adolescence (i.e., parental marital status, dating experience, gender, and age) were also taken into account by examining their influence on relationship anxiety, relationship avoidance, and dating partner identity exploration. The current study was conducted using a sample of 882 adolescents ages 14-18 in public high schools throughout the state of Alabama.

Results indicated that parental warmth/ support, romantic relationship anxiety, and romantic relationship avoidance were significantly related to dating partner identity

exploration. However, parental warmth/support was significantly associated with romantic relationship anxiety but not with romantic relationship avoidance. Romantic relationship anxiety was not a mediator of the relationship between parental warmth/support and dating partner identity exploration. Therefore, relationships with parents and anxiety in romantic relationships each directly affect dating partner identity exploration during adolescence, influencing overall identity development. Analyses also indicated that gender was a moderator of the relationships among the variables, such that parental warmth/ support significantly predicted romantic relationship anxiety for females and not for males, whereas romantic relationship anxiety was more strongly linked with dating partner identity exploration for males than for females. Parental marital status did not moderate the associations among variables.

Taken together, the results of this study are important because this study demonstrates that parental warmth/ support and comfort with intimacy have a significant influence on dating partner identity exploration in adolescent romantic relationships. Furthermore, other factors such as gender and parental marital status do appear to influence dating partner identity exploration during adolescence. Nonetheless, future research should examine associations among these factors, as well as the effects of factors affecting parental warmth and support and comfort with intimacy, in more detail in order to gain a clearer picture of how adolescents go about exploring the dating partner identity within romantic relationships.

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## TABLE OF CONTENTS

LIST OF TABLES.....	xii
LIST OF FIGURES.....	xiii
INTRODUCTION.....	1
Identity Development.....	3
Intimacy.....	6
Parent-Adolescent Relationships.....	7
Study Hypotheses.....	10
LITERATURE REVIEW.....	12
Romantic Relationships during Adolescence.....	12
Identity Development.....	22
Intimacy in Adolescent Romantic Relationships.....	35
Intimacy and Identity.....	41
Parental Warmth and Support.....	45
Summary of Study Goals.....	51
METHODS.....	53
Sample and Procedure.....	53
Measures.....	54
Relationship Anxiety and Avoidance (Comfort with Intimacy).....	54
Dating Partner Identity Exploration.....	55
Quality of the Parent-Adolescent Relationship.....	55
Demographics.....	56

RESULTS.....	57
Preliminary Analyses.....	57
Bivariate Correlations.....	57
Measurement Model.....	62
Hypothesized Structural Equation Model.....	64
Trimmed Model and Mediation.....	68
Trimmed Model.....	68
Mediation.....	69
Moderation by Gender and Parental Marital Status.....	71
Moderation by Gender.....	71
Moderation by Parental Marital Status.....	75
Alternate Model.....	79
DISCUSSION.....	83
Overview.....	83
Hypothesized and Trimmed Models.....	83
Mediation.....	89
Moderation by Gender.....	89
Moderation by Parental Marital Status.....	91
Alternate Model.....	92
Limitations.....	93
Conclusion and Future Directions.....	95
REFERENCES.....	97
APPENDICES.....	112
Appendix A.....	113

Appendix B.....	118
Appendix C.....	119
Appendix D.....	120
Appendix E.....	121
Appendix F.....	122
Appendix G.....	123
Appendix H.....	124
Appendix I.....	125
Appendix J.....	126
Appendix K.....	127
Appendix L.....	128
Appendix M.....	129
Appendix N.....	130

## LIST OF TABLES

Table 1. Means and Standard Deviations.....	58
Table 2. Bivariate Correlations.....	59
Table 3. Standardized Confirmatory Factor Analysis Loadings for Measurement Model.....	63
Table 4. Comparison of Models: Goodness of Fit Statistics for Full Sample.....	65
Table 5. Path Coefficients for Full Hypothesized Structural Model.....	67
Table 6. Comparison of Models: Goodness of Fit Statistics by Gender.....	72
Table 7. Standardized Confirmatory Factor Analysis Loadings for Measurement Model by Gender.....	73
Table 8. Comparison of Models: Goodness of Fit Statistics by Parental Marital Status...76	
Table 9. Standardized Confirmatory Factor Analysis Loadings for Measurement Model by Parental Marital Status.....	77
Table 10. Comparison of Alternate Models: Goodness of Fit Statistics for Full Sample.....	81
Table 11. Path Coefficients for Alternate Model.....	82
Table 12. Eigenvalues for Anxiety Parcels.....	118
Table 13. Inter-item Correlations for Anxiety.....	118
Table 14. Eigenvalues for Avoidance Parcels.....	119
Table 15. Inter-item Correlations for Avoidance.....	119

## LIST OF FIGURES

Figure 1. Conceptual Model.....	11
Figure 2. Hypothesized Structural Model with Predictors Only.....	120
Figure 3. Full Hypothesized Structural Model.....	121
Figure 4. Trimmed Model.....	122
Figure 5. Trimmed Model with Anxiety Removed and Constrained Path.....	123
Figure 6. Trimmed Model with Constrained Path .....	124
Figure 7. Trimmed Model Females.....	125
Figure 8. Trimmed Model Males.....	126
Figure 9. Trimmed Model Single Parent .....	127
Figure 10. Trimmed Model First Married Parent .....	128
Figure 11. Trimmed Model Remarried Parent.....	129
Figure 12. Alternate Model.....	130

## INTRODUCTION

Researchers are beginning to find evidence that youth today even as early as sixth grade (i.e., youth as young as 11 years old) tend to express strong interest in romantic relationships (Darling, Dowdy, Van Horn, & Caldwell, 1999). In fact, one national study found that 26% of the 12-year-olds who participated had already been in at least one romantic relationship, and that more than 80% of adolescents nationwide are estimated to have been in at least one romantic relationship by the age of 18 (Carver, Joyner, & Udry, 2003). Such early initiation and prevalence of romantic relationships among adolescents is notable because, even if these relationships are qualitatively different from more mature romantic relationships later in life, the romantic relationships that adolescents experience may have a significant impact on important developmental processes and outcomes with long-lasting effects (Collins, 2003).

Dating relationships in adolescence have sometimes been thought of as transient and superficial, merely practice for later adult relationships (Collins, 2003). However, Carver et al. (2003) found that from 20% of early adolescents to 60% of late adolescents stated that their dating relationships have lasted at least 11 months. Smetana, Campione-Barr, and Metzger (2006) noted that, romantic relationships during middle adolescence are considered normative and relatively stable compared to earlier romantic relationships. Adolescent romantic relationships have also been found to resemble adult romantic

relationships in the impact that dimensions such as commitment, communication, companionship, and passion have on relationship satisfaction (Levesque, 1993).

Although the importance of adolescent romantic relationships has been established among researchers, many significant dimensions of these relationships have not been explored. In fact, Collins and van Dulmen (2006) have pointed out that the majority of research on adolescent romantic relationships is centered on status aspects of dating such as whether and when adolescents are involved in dating relationships as well as regularity of adolescent dating. These authors further emphasize that there are many aspects of adolescent romantic relationships which affect adolescent development and the development of later romantic relationships. While progress is beginning to be made in the field of adolescent dating or romantic relationships, this area of research is still considered to be the “last frontier” for those who study adolescent relationships because empirical data on early and middle adolescents’ romantic relationships is sparse (Giordano, 2003).

The current study sought to expand the research by examining associations among intimacy in adolescent romantic relationships, the parent-adolescent relationship context, and identity formation in adolescence. In order to understand the nature of these connections, past literature that has addressed the process of identity formation in adolescence, the nature of intimacy and dating relationships among adolescents, and ways that parent-adolescent relationships are associated with adolescent identity development and peer relationships (i.e., friendships and romantic relationships) is reviewed. These three areas are examined together because doing so provides a more

complete picture of important factors that may influence development of how adolescents define themselves as “dating partners.”

### *Identity Development*

Identity has been defined by researchers as a “self-constructed dynamic organization of drives, abilities, beliefs, and personal history into a coherent and autonomous self that guides the unfolding of one’s adult life course” (Montgomery, 2005, p.347). Erikson (1968) considered identity to be shaped by both personal and social factors, as he described ego identity as comprised of an awareness of the ego’s integration of the self as well as one’s style of individuality and the individual’s meaning for significant others. Furthermore, the overall identity of a person can be thought of as comprised of a variety of domains in which identity may function differently, such as interpersonal domains of friendship and dating roles or ideological domains of occupational choice and ideological beliefs (Schwartz, 2001). Hence, identity formation, which becomes a central task during adolescence, is the process by which various roles, capacities, identifications, and needs across ideological and interpersonal domains are synthesized into a representation of the self (Erikson, 1968). Many theorists and researchers since Erikson have found that the process of identity formation is comprised of two main underlying dimensions, exploration and commitment (e.g., Luyckx, Goossens, Soenens, & Beyers, 2006; Schwartz, 2001; Schwartz & Dunham, 2000).

Exploration and commitment dimensions of identity formation have been used by researchers to describe the extent to which identity formation has been achieved (e.g., Archer, 1989; Berman, Weems, Rodriguez, & Zamora, 2006; Kerpelman & White, 2006; Marcia, 1966; Marcia, 1994; Meeus, 1996; Thorbecke & Grotevant, 1982). The



exploration dimension of identity formation is described as a process by which identity alternatives are examined as an individual seeks to find out about him or herself and the environment (Berman, Schwartz, Kurtines, & Berman, 2001). Commitment, however, is the selection of particular goals, values, and beliefs, and is generally considered to be the end result of the exploration process. Alternately, commitment can be the result of making identity choices without prior exploration (Schwartz, 2001). Although both exploration and commitment are considered essential for identity achievement, many researchers believe that identity exploration is of particular interest when examining the identity formation process in middle adolescence, since younger adolescents are generally just beginning to address identity issues due to timing of physical maturation, cognitive development, and societal expectations (e.g., Berzonsky, 1990; Berzonsky, 1992; Grotevant, 1987; Kerpelman & Lamke, 1997; Kerpelman, Pittman, & Lamke, 1997; van Hoof & Raaijmakers, 2002).

Researchers have noted that interpersonal relationships are a particularly important arena for the exploration of various identity domains (Grotevant & Cooper, 1985), as these relationships may provide valuable information about the fit between one's view of oneself and the way others view him or her (Schwartz, 2001). Therefore, identity exploration can have important implications for adolescent development because of its place as a central process in identity formation during adolescence. In the very least, those individuals with a more developed identity are more cognizant of their own strengths and weaknesses as they navigate various relationships and events throughout life (Luyckx, Soenens, Goossens, Beckx, & Wouters, 2008). Overall, it seems apparent

that identity exploration during adolescence has important consequences for the general development of the individual.

The interpersonal domain of identity formation has been recognized as a domain that is explored mainly through interactions in relationships with friends, family, and dating partners (Thorbecke & Grotevant, 1982). Identity formation in the interpersonal domain, then, can be described as the process of constructing a set of beliefs about the self regarding interpersonal relationships through experiences in such relationships (Thorbecke & Grotevant), generally reflecting how one defines oneself within close relationships. Researchers have noted that because close relationships are an important context for identity formation, the interpersonal domain of identity formation may be especially relevant for outcomes in relationships with significant others during adolescence and in adulthood (Grotevant, Thorbecke, & Meyer, 1982; Kerpelman & White, 2006). Although the importance of interpersonal identity formation for both males and females has been acknowledged, limited empirical research has been conducted on interpersonal identity formation (e.g., Bartle-Haring, 1997; Branch & Boothe, 2002; Forbes & Ashton, 1998; Kerpelman & White, 2006; Markstrom-Adams & Adams, 1995). Because of the salience of interpersonal identity formation in the domains of friendship, dating, and family contexts during adolescence, and because more than 80% of adolescents are estimated to have been in at least one romantic relationship by the age of 18 (Carver et al., 2003), it seems that interpersonal identity formation within adolescent dating relationships may have significant consequences for intimacy in later romantic relationships. Hence, exploration of the *dating partner identity*, or who one is within the dating relationship, may set the stage for commitment regarding the dating partner (or

relationship partner) identity in adulthood, and may have implications for the development of intimacy (Adams & Archer, 1994). Furthermore, very few studies have been conducted regarding adolescent interpersonal identity formation in the dating context (e.g., Allison & Schultz, 2001; Thorbecke & Grotevant, 1982; Zimmer-Gembeck & Petherick, 2006), although this topic seems to be an important area of study for understanding aspects of both identity formation and intimacy in romantic relationships (Archer, 1992; Patterson, Sochting, & Marcia, 1992). Finally, no studies have been identified which specifically examine exploration of the “dating partner identity,” how adolescents think about who they are as partners within romantic relationships.

### *Intimacy*

Intimacy in adolescent romantic relationships is of particular interest for understanding differences in exploration of the dating partner identity. Although Erikson (1968) theorized that true intimacy would only be possible after the majority of identity formation has taken place, other theorists have posited that intimacy during adolescence may function to form a framework for security and connectedness as well as to enhance identity development through exploration (Dyk & Adams, 1987). That is, through intimate relationships, the adolescent can discover which inner resources can be either developed or compromised in order to enhance mutual satisfaction in the relationship (Dyk & Adams), thereby developing the sense of self or identity as a romantic partner. According to Dyk and Adams, the aim of identity development is to discover who one is within social contexts, but the main issue of intimacy development is to find out how the individual can be known by another person. Although romantic intimacy in adolescence is not expected to be the mature form of intimacy generally experienced by adults,

intimacy in adolescent romantic relationships is a developing form of such intimacy. Furthermore, Montgomery (2005) points out that many developmental tasks of adolescence such as identity formation now appear to extend into adulthood, and that several tasks thought to be part of adulthood such as achieving intimacy are initiated during adolescence. Thus, it appears that these distinct processes are interrelated during adolescence and young adulthood (Seginer & Noyman, 2005).

Because adolescence is a time of development of the capacity for mature intimacy with significant others, intimacy development during adolescence can best be examined in terms of *comfort with intimacy* in the romantic relationship context. Researchers have found that attachment security lies at the heart of the abilities necessary for development of the capacity for intimacy (Allen & Land, 1999; Cassidy, 2001; Collins & Sroufe, 1999). Romantic attachment, as discussed by Hazan and Shaver (1987), can be indicative of comfort with intimacy in the romantic relationship when operationalized along the dimensions of anxiety and avoidance. In fact, adult romantic attachment styles of secure, preoccupied, dismissing, and fearful (Brennan, Clark, & Shaver, 1998) are even described in terms of comfort with closeness and intimacy (Obegi, Morrison, & Shaver, 2004). A primary relationship that has been shown to influence adolescents' comfort with intimacy is the parent-adolescent relationship.

#### *Parent-Adolescent Relationships*

The limited research that has been conducted on adolescent romantic relationships indicates that parental warmth and support influences the quality and course of romantic relationships in various ways over time (e.g., Conger, Cui, Bryant, & Elder, 2000; Connolly & Johnson, 1996; Furman et al., 2002; Gray & Steinberg, 1999; Joyner &

Campa, 2006; Meeus, Branje, van der Valk, & de Weid, 2007; Seiffge-Krenke, Shulman, & Klessinger, 2001; Smetana, Campione-Barr, & Metzger, 2006). In particular, parental warmth and support during adolescence have been found to be positively associated with outcomes such as higher levels of support in adolescent romantic relationships (Connolly & Johnson, 1996) and romantic relationship quality in early adulthood (Conger et al., 2000).

Studies examining the influence of parent-adolescent relationship quality on adolescent peer and close friend relationships also have suggested that parental warmth and support in parent-adolescent relationships have an important impact in on relationships between adolescents and their friends and dating partners(e.g, Dekovic & Meeus, 1997; Field, Diego, & Sanders, 2002). Such information concerning the influence of parental warmth and support on adolescent peer relationships is especially relevant given that adolescent peer relationships are often the context in which adolescent romantic relationships emerge (Bouchey & Furman, 2003; Connolly & Goldberg, 1999). Overall, it appears that parental warmth and support may play an important part in adolescent romantic relationships by influencing closeness, support, and even intimacy in these relationships.

Parent-adolescent relationships have also been identified as a potentially significant factor affecting identity exploration during adolescence (e.g., Grotevant and Cooper, 1985; Luyckx, Goossens, Soenens, & Beyers, 2006). More specifically, Grotevant and Cooper found that identity exploration was directly predicted by certain intimacy-like styles of communication and interaction within the family, specifically, responsiveness, sensitivity, and openness. Luyckx et al. (2006) later found that

exploration in depth (i.e., obtaining information about current identity choices or commitments) was positively related to having a supportive and nurturing climate in the parent-adolescent relationship. Taken together, these findings indicate that warmth and support in the parent-adolescent relationship may have an important direct influence on identity exploration during adolescence, and therefore should be given attention in research examining possible predictors of dating partner identity exploration.

Parental warmth and support also may influence identity exploration indirectly through comfort with intimacy. In particular, parental warmth and support may influence identity exploration indirectly by impacting the adolescent's comfort with intimacy within relationships, especially considering that parental warmth and support is itself an intimacy-like relationship quality which may influence comfort with intimacy in other relationships. It is possible, therefore, that comfort with intimacy may mediate the relationship between parental warmth and support and dating partner identity exploration.

Other variables which may affect intimacy and identity exploration in adolescent dating relationships include gender, with females reporting higher levels of affective intensity, support, and caregiving in adolescent romantic relationships than males do (Shulman & Scharf, 2000); dating experience, which may influence gains in romantic relationship quality over time through learning experiences (Seiffge-Krenke, 2003); and age, as attachment-like qualities of support-seeking and intimacy increase with age in adolescent dating relationships (Collins & van Dulmen, 2006; Connolly & Johnson, 1996; Furman & Buhrmester, 1992; Furman & Wehner, 1997; Lempers & Clark-Lempers, 1993). Furthermore, because of the possible influence of parental marital status on connectedness and attraction in romantic relationships in early adulthood (Seiffge-

Krenke, Shulman, & Klessinger, 2001), it is expected that parental marital status may also have some effect on intimacy and exploration of the dating partner identity in romantic relationships during adolescence. Specifically, having parents married to each other instead of divorced, single, or remarried parents may be linked with higher levels of comfort with intimacy and dating partner identity exploration (e.g., Seiffge-Krenke et al., 2001; Conger et al., 2000). Research addressing each of these factors in adolescent romantic relationships is limited, but is more abundant in the study of young adult romantic relationships (Collins, 2003).

In summary, although it is apparent that comfort with intimacy may promote identity exploration and development, particularly within the interpersonal domain, current empirical research has not addressed relationships between comfort with intimacy and exploration of the dating partner identity. The goal of this study, therefore, was to examine the proposed relationship between comfort with intimacy, as represented by dimensions of romantic relationship avoidance and anxiety in adolescent romantic attachment, and exploration of the dating partner identity in adolescence as represented by the degree to which adolescents report in-depth exploration of their dating identities. This study also examined direct and indirect influences of parental warmth and support on exploration of the dating partner identity.

### *Study Hypotheses*

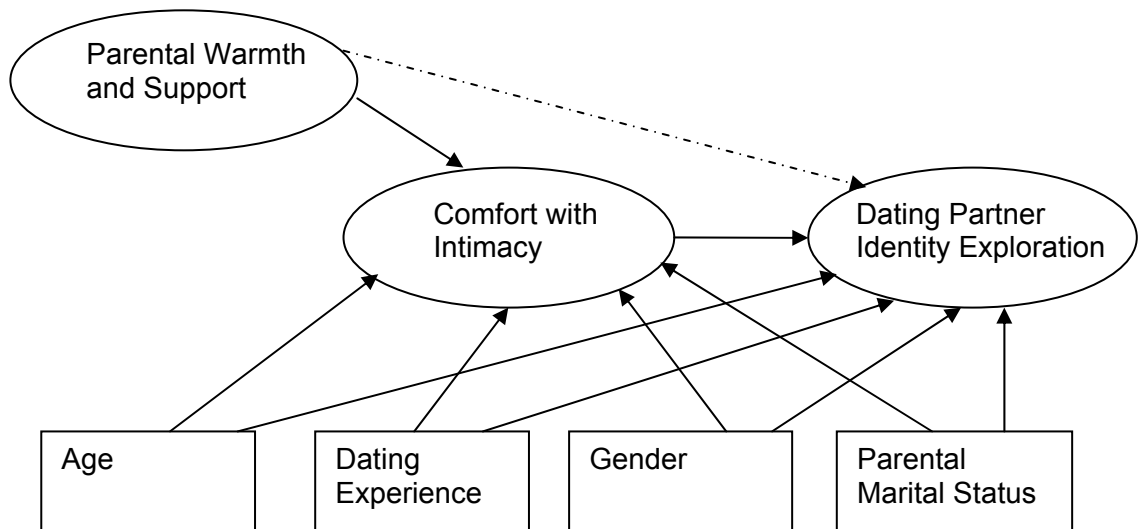
1) Comfort with intimacy, as indicated by low levels of both relationship anxiety and relationship avoidance in romantic relationship attachment, was expected to positively predict exploration of the dating partner identity. Parental warmth and support

was expected to positively predict both comfort with intimacy and dating partner identity exploration (see Figure 1).

2) Comfort with intimacy was expected to mediate the relationship between parental warmth and support and dating partner identity exploration. (Influences of adolescent age, gender, dating experience, and parental marital status were controlled for in the direct effects and mediation models.)

3) Gender was expected to moderate associations among parent-adolescent warmth/support, comfort with intimacy, and dating partner identity exploration. Females were expected to show stronger associations among constructs in the model than were males.

Figure 1. Conceptual Model



*Note:* a) Comfort with intimacy was tested with relationship anxiety and relationship avoidance as separate factors in the model. b) Influences of age, dating experience, gender, and parental marital status on comfort with intimacy and dating partner identity exploration were controlled.



## LITERATURE REVIEW

The goal of the current study was to examine associations between parent-adolescent relationships, comfort with intimacy, and dating partner identity exploration among adolescents. First, research on adolescent romantic relationships is reviewed in order to examine adolescent romantic relationships as an important context for identity formation. Next, theory and research on identity formation, a process which is generally thought to reach its climax in adolescence and young adulthood (Schwartz, 2001), is explored. More specifically, this review examines the process of identity exploration and identity development in the interpersonal identity domain. Then, research on intimacy in adolescent romantic relationships is presented, and research regarding linkages between intimacy and identity development in adolescence is examined. Finally, literature on the influence of warmth and support in parent-adolescent relationships on intimacy in adolescent relationships and on identity exploration in adolescence is reviewed.

### *Romantic Relationships during Adolescence*

Although romantic relationships in adolescence are not a universal experience, adolescent dating relationships are considered normative for adolescents in the United States (Smetana, Campione-Barr, & Metzger, 2006). According to a recent report by Karney, Beckett, Collins, and Shaw (2007), adolescent romantic relationships have also been identified by researchers as important influences on emotional health (e.g., Monroe, Rohde, Seely, & Lewinsohn, 1999; Welsh, Grello, & Harper, 2003), social and academic

competence (e.g., Furman & Shaffer, 2003; Giordano, Manning, & Longmore, 2006; Neemann, Hubbard, & Masten, 1995), and self-esteem (e.g. Connolly & Konarski, 1994; Darling et al., 1999). In order to understand more about what normative adolescent romantic relationships may look like, Carver, Joyner, and Udry (2003) examined the frequency of adolescent dating as well as characteristics of these relationships in their study analyzing data from the National Longitudinal Study of Adolescent Health.

The authors sought to answer several research questions in this study, including what percentage of adolescents experience romantic relationships by late adolescence, whether these relationships are generally stable and which kinds of behaviors are typical in adolescent romantic relationships. They hypothesized that prevalence of adolescent romantic relationships would increase with age, and that a higher percentage of girls than boys would be involved in romantic relationships at every age. The researchers also hypothesized that adolescent romantic relationships would be less stable than young adult romantic relationships; however, relationship stability, intimacy, and commitment were expected to increase with adolescents' age. Furthermore, girls were expected to express higher levels of intimacy and commitment than boys were (Carver, Joyner, & Udry). To test their hypotheses, the researchers used data from two waves of the National Longitudinal Study of Adolescent Health surveying adolescents in grades 7 through 12 from 80 different high schools. This sample is nationally representative in size, region, urbanicity, school type, and racial mix. All participants completed a questionnaire assessing dimensions of intimacy and commitment, while a subsample was also interviewed about their romantic relationship involvement.

Carver et al. (2003) found that approximately 55% of the adolescents across the ages studied had experienced a romantic relationship, while more than 80% of adolescents age 18 had had some relationship experience. Furthermore, the researchers found that the sexes were equally likely to experience a romantic relationship. That is, a large majority of adolescents of both sexes had experienced at least one romantic relationship by the age of 18. Boys listed relationships that were shorter than those listed by girls, and older adolescents typically reported longer relationships. In addition, girls on average reported more acts of intimacy and commitment than did boys, while younger adolescents were generally less committed and intimate overall. Among those in relationships at each age level, girls reported slightly higher engagement in sexual behaviors (i.e., as defined by touching each other under the clothing, touching each other's genitals, and having sexual intercourse) than did boys of the same age, while older adolescents reported more sexual behavior in their romantic relationships than did younger adolescents. The results of this study highlight the prevalence of romantic relationships among adolescents. Because adolescent romantic relationships are so prevalent, these relationships may significantly influence adolescent development. Therefore, it is important for researchers to examine more closely differences in adolescent romantic relationship beliefs and behaviors in order to see how various dimensions of adolescent development may be affected by romantic relationship involvement.

Darling, Dowdy, Van Horn, and Caldwell (1999) examined age differences in involvement in mixed-sex and dating contexts in order to discover how mixed-sex settings and exposure to dating during adolescence may affect perceptions of competence

or self-esteem. The authors hypothesized that older adolescents would be more involved in mixed-sex settings and that higher levels of interest in dating would magnify the influence of exposure to mixed-sex and dating contexts on adolescent self-esteem, whether that influence was negative or positive. This study was conducted using an in-school questionnaire, an interview, and an interactive diary component administered to a sample of 128 sixth graders, 136 seventh graders, and 129 eighth graders. Just over half of this primarily White sample was female, and 70% of participants resided with both biological parents.

Findings of this study indicated that among sixth, seventh, and eighth graders, interest in having a boyfriend or girlfriend was already well-established. Older adolescents in this sample also dated more frequently and had more boy/girlfriends during the current year than did younger adolescents. Furthermore, this study found that exposure to and comfort with other-sex peers predicted positive self-assessments, suggesting that adolescent dating may possibly facilitate healthy development in some areas, such as self-perceptions. In fact, eighth graders' reports of their feelings during activities with same- and other-sex peers provided support for the idea that adolescents find involvement in mixed-sex settings enjoyable and challenging rather than stressful (Darling et al., 1999). Thus, the results of this study confirm that adolescent romantic relationships are both normative and important experiences for adolescents, with potentially far-reaching consequences for self-esteem and adjustment.

Results of the studies by Carver et al. (2003) and by Darling et al. (1999) support the theoretical propositions put forth by Collins (2003) in his review of literature on adolescent romantic relationships. Collins noted that several misconceptions about

adolescent romantic relationships have been prevalent among researchers, but that these myths are largely being dispelled by the current empirical literature examining adolescent romantic relationships. The first and perhaps most predominant myth about adolescent romantic relationships is that they are trivial and short-lived. However, as noted earlier, recent research has shown that these relationships are much more important and much less fleeting than was once believed (e.g., Carver et al., 2003; Levesque, 1993). Collins also pointed out that adolescent romantic relationships have significant consequences for adolescent functioning and for later outcomes regarding psychosocial development and relationships (e.g., Furman & Shaffer, 2003). Another myth which Collins debunked is the idea that adolescent romantic relationships simply reflect processes and influences of other relationships. In fact, current research implies romantic relationships have a unique impact on adolescent developmental outcomes that does not merely reflect the influence of other close relationships in adolescence (e.g., Furman, Simon, Shaffer, & Boucheay, 2002). Finally, Collins suggested that the idea that adolescent romantic experiences should only be studied because of their negative consequences is unwarranted, because current research has documented many significant positive correlates of adolescent romantic relationships (e.g., Furman & Shaffer, 2003).

As noted by Collins (2003), researchers have largely ignored positive influences of adolescent romantic relationships and have more often focused on the negative effects of adolescent romantic relationships, such as influences on levels of conflict and depression during adolescence. Laursen (1995) proposed in his study of over 300 high-school adolescents that while conflict with parents is the most reported form of conflict, adolescents also experience a great deal of conflict with romantic partners and peers.

Indeed, results of Laursen's study indicated that adolescents reported an average of one conflict or interpersonal disagreement every hour with mothers, every two hours with romantic partners, and every six hours with peers. These findings indicate that adolescents who are in romantic relationships may have more opportunities to experience conflict than those who are not in romantic relationships. While conflict is considered to be a fairly normative experience, conflict can have important implications for the quality of relationships in which these adolescents are involved (Laursen).

Depression, which is an important predictor of a variety of negative outcomes during adolescence, also has been linked with adolescent romantic relationships. Joyner and Udry (2000) used data from a sample of over 8,000 adolescents who were part of the nationally representative National Longitudinal Study of Adolescent Health data set in order to examine how adolescent romantic relationships may be connected to levels of depression. The authors hypothesized that adolescents who became involved in romantic relationships would experience a greater increase in depression than those who did not become involved in romantic relationships, and that this influence would be strongest for younger adolescents and females. The authors found that both boys and girls who became involved in romantic relationships experienced a greater increase in levels of depression than those who did not become involved in romantic relationships; furthermore, the increase in depression level was greater for girls than for boys. Joyner and Udry also noted that the mechanisms by which this increase in depression occurred appeared to be number and stability of relationships for boys along with changes in school performance and relationships with parents, while greater increases in level of depression experienced by girls were linked to the number and stability of relationships, as well as more dramatic

changes in relationships with parents than were experienced by boys. Overall, however, both boys and girls appear to be more vulnerable to depression once they become involved in romantic relationships during adolescence.

In a multifaceted study of the developmental significance of adolescent romantic relationships, Giordano, Manning, and Longmore (2006) used data from the National Longitudinal Study of Adolescent Health data set in order to examine whether romantic partners influence delinquency. They also used data from the Toledo Adolescent Relationships Study, which draws from a stratified random sample of all youth enrolled in grades 7, 9, and 11 in a mostly urban county in Ohio, in order to assess the relationship between school achievement and romantic relationship involvement. The researchers believed that because adolescent romantic relationships are generally characterized by a great deal of interaction between romantic partners, adolescent romantic relationships may affect behavioral outcomes through the influence of the romantic partner. That is, romantic partners may serve as important references, affecting perceptions of the self, behaviors, and views of relationships (Giordano et al.).

In their analyses, Giordano et al. (2006) found that the romantic partner was significantly related to delinquent behavior, even after delinquent behavior of friends was taken into account. In addition, with regard to academic achievement, the researchers found that grades of the romantic partner significantly predicted the grades of the participant, even when orientation of peers toward academics and parental monitoring and interest in the participant's academic work were taken into account. These results suggest that romantic relationships in adolescence may indeed have important effects for behavioral outcomes through the influence of the romantic partner on the individual.

Highlighting some of the positive correlates of adolescent romantic relationships in their literature review, Furman and Shaffer (2003) emphasized the idea that adolescent romantic relationships significantly impact general development during adolescence. With regard to identity formation, Furman and Shaffer pointed out that research suggests that adolescents develop distinct self-perceptions within the romantic context which are linked to identity formation, and that romantic relationships may also affect the development of facets of identity in both the ideological and interpersonal domains (e.g., Erikson, 1968; Harter, 1988). Also, romantic experiences and romantic self-concept may affect global self-esteem (e.g., Harter, 1988), and may positively or negatively impact peer relationships by affecting one's standing in the peer group or by influencing specific friendships (e.g., Furman, 1999; Roscoe, Diana, & Brooks, 1987). Finally, while some romantic partnerships may detract from attention to academic achievement, other romantic partnerships may promote achievement by studying together, helping with homework, encouraging achievement, providing support, and even influencing career plans and aspirations (e.g., Berndt & Keefe, 1995). However, despite the empirical evidence that adolescent romantic relationships may have many important positive and negative consequences for overall growth and development, the majority of literature regarding romantic relationships has only examined these relationships among young adults and adults (Collins, 2003).

Although adolescent dating relationships have mostly been overlooked in the general empirical literature on romantic relationships, some researchers have shown ways in that adolescent romantic relationships are similar to romantic relationships of adults. For instance, Levesque (1993) conducted a study on adolescent romantic relationships



exploring correlations of relationship characteristics with relationship satisfaction among over 300 high-school adolescents who claimed to be involved in a dating relationship at the time of the study. Although the author did not list specific hypotheses, the intent of the study was to investigate how adolescent romantic relationships differ from adult romantic relationships, how gender may influence relationship satisfaction in adolescence, and how “love relationships” operate in the lives of adolescents.

Levesque (1993) used measures developed or adapted specifically for use with adolescents, including those used to assess relationship satisfaction, relationship experiences and love styles. From his analyses of the data, Levesque found that relationship aspects of passion, giving and receiving communication, commitment, emotional support, and togetherness were correlated with relationship satisfaction. Furthermore, similarities between the sexes in correlates with relationship satisfaction were evident such as agape (giving love) being correlated with relationship satisfaction for both sexes. However, some differences between sexes were found, such as only agape being related to relationship satisfaction for boys, whereas for girls, both agape and eros (lust) were positively related to relationship satisfaction and ludus (playful love) was negatively related to girls’ relationship satisfaction. Overall, though, the author noted that for both boys and girls, there was a remarkable similarity between variables linked with relationship satisfaction in adolescence, such as togetherness, commitment, and emotional support, and variables typically linked with relationship satisfaction in adulthood (Levesque). Therefore, adolescent romantic relationships are not irrelevant in the study of romantic relationships, but should be recognized as important precursors to romantic relationships in adulthood.

In order to better understand the nature of adolescent romantic relationships during different age periods, Seiffge-Krenke (2003) examined the frequency and quality of romantic relationships in a longitudinal study following adolescents from age 13 to age 21. Seiffge-Krenke hypothesized that romantic relationships in early adolescence would be more short-term and casual as part of the “initiation” phase (i.e., about 13 years old), whereas romantic relationships in middle adolescence would be characterized by slightly more affection and intimacy during the “status” phase (i.e., about 15 years old). The author also hypothesized that during later adolescence (beginning approximately at age 17), romantic relationships would fit more into an “affection” phase where affection and intimacy qualities of romantic relationships, as well as length of relationships, would more closely resemble those romantic relationships typical of early adulthood. In addition, the author believed that during the “affection” phase of late adolescence, the importance of the relationship with the romantic partner would outweigh influences of friends and peers, and that quality of relationships with parents during this phase would predict quality of romantic relationships in young adulthood.

Seiffge-Krenke (2003) found general support for the study hypotheses in a sample of 145 German youth studied over a period of eight years. Based on this study, there appears to be a developmental sequence of adolescent romantic relationships, with romantic relationships during middle and late adolescence beginning to more closely resemble romantic relationships of adulthood in affection, intimacy, and duration. The author also noted that although peer support was not predictive of romantic relationships in early adulthood, quality of the relationship with the mother at all stages of adolescence was predictive of later romantic outcomes. However, the quality of the romantic

relationship during late adolescence was the strongest predictor of later romantic relationship quality. Hence, it is apparent that romantic relationships throughout the course of adolescence are important influences on later romantic relationship experiences, and adolescent romantic relationships, rather than being trivial and transitory throughout adolescence, generally begin to take on important characteristics of affection and intimacy during middle and late adolescence.

Taken together, the findings of these studies indicate that romantic relationships are a normative experience during adolescence, with far-reaching consequences for aspects of adolescent development and psychological well-being such as self-esteem, depression, and delinquency. Furthermore, adolescent romantic relationships have been found to consist of characteristics similar to those typical of adult romantic relationships such as passion, communication, commitment, emotional support, togetherness, affection, and intimacy. This especially is true in late adolescence, but begins in middle adolescence. In addition, adolescent romantic relationships seem connected to later romantic relationships in that romantic experiences in adolescence predict romantic relationship quality during young adulthood. Therefore, adolescent romantic relationships should be examined empirically to see how these relationships are linked to important aspects of development, such as identity development, that may influence long-lasting outcomes for the individual.

### *Identity Development*

Identity development is a major process occurring during adolescence which is believed to have important consequences for psychosocial well-being (Erikson, 1968). That is, although identity is shaped throughout the lifespan, identity formation is thought

to reach its climax during adolescence, the transition between childhood and adulthood (Erikson). Erikson suggested that adolescence is a time when individuals seek continuity in their sense of self, integrating various skills, roles, beliefs, ideals, romantic preferences, and conceptions of the self held by significant others into a coherent identity through identity synthesis (Schwartz, 2001). Identity confusion, however, is marked by failure to construct a consistent set of ideals as the foundation of the adult identity (Schwartz). The formation or synthesis of identity is thought to be key to healthy outcomes in subsequent stages of psychosocial development (Erikson, 1968). With regard to identity formation within the adolescent dating relationship, Erikson also theorized that romantic relationships in adolescence can be an especially salient arena in which the individual can clarify his or her identity (Erikson).

In a review of Eriksonian and neo-Eriksonian theories of identity, Schwartz emphasized relationships among various theories of identity formation. In particular, he highlighted Marcia's theory of identity formation, which is based on the idea that identity formation occurs through the processes of identity exploration and identity commitment (Marcia, 1966; Schwartz & Dunham, 2000). Schwartz (2001) explained identity exploration and commitment by stating that identity exploration consists of examining various identity alternatives or options, and identity commitment involves selecting of one or more of these identity options and enacting that selection. Marcia also devised four identity statuses based on identity exploration and commitment levels, with the identity achievement status consisting of identity commitment occurring at the end of identity exploration (Marcia, 1966). Since healthy identity commitment during late adolescence or early adulthood is expected to follow identity exploration during the

adolescent years, the process of identity exploration is considered to be the more salient process of identity formation during adolescence (Marcia).

Several other Eriksonian and neo-Eriksonian theories of identity emphasize the process of exploration during identity formation (Schwartz, 2001). For example, Berzonsky (1990, 1992) is noted for his identity style model, in which the individual's approach to making decisions pertaining to personal identity determines whether that person is considered to have an informational, normative, or diffuse identity style (Berzonsky, 1990). Of the three identity styles in this model, the informational identity style appears to be the most adaptive for healthy identity formation because of factors such as active exploration and flexible commitment which characterize this identity style (Berzonsky, 1992). Berzonsky (1990) also asserted that personal identity is formed through social interactions, and it is within these interactions that individuals exhibit the decision-making tendencies typical of the informational, normative, or diffuse identity style in a dynamic process of identity formation over time.

Another important perspective that builds on Erikson's and Marcia's theories regarding identity formation based is Grotevant's process model of identity formation, which refers to identity exploration as the main process of identity formation and to identity commitment as an outcome of identity formation (Grotevant, 1987). Grotevant believed that identity exploration is predominantly facilitated by both problem-solving skills and by favorable orientation toward exploration. Kerpeleman, Pittman, and Lamke (1997) extended Grotevant's process model of identity formation using the identity control theory framework, which focuses on the ways in which interpersonal interactions enhance identity exploration and formation. According to identity control theory, identity

exploration is driven by acceptance or rejection of feedback concerning identity and the self which is given to the individual by parents, close friends, romantic partners, or other significant individuals (Kerpelman & Lamke, 1997). Thus, identity exploration is considered by some theorists to be an individual process which takes place in an interpersonal context (e.g., Kerpelman & Lamke, 1997; Kerpelman, Pittman, & Lamke, 1997).

Luyckx, Goossens, Soenens, and Beyers (2006) further investigated the process of identity exploration in adolescence by developing a model of identity formation involving four separate dimensions of exploration in breadth, exploration in depth, commitment making, and identification with commitment. Luyckx et al. conceptualized exploration in breadth as the gathering of information about possible identity alternatives before commitment, commitment making as making identity choices, exploration in depth as the gathering of information about current identity choices, and identification with commitment as the degree of identification with identity choices made. The researchers predicted that exploration in depth would be positively related to commitment making and identification with commitment, while exploration in breadth would be negatively related to both commitment dimensions. Furthermore, the researchers hypothesized that both commitment dimensions and exploration in depth would be positively related to adjustment and to supportive parenting.

Using the Utrecht-Groningan Identity Development Scale (U-GIDS) measure (Meeus & Dekovic, 1995) to assess identification with commitment and exploration in depth in both the ideological and interpersonal domains, Luyckx et al. (2006) surveyed 565 late adolescent and early adult college freshmen from a university in Europe. The

majority of students in this sample were middle-class, Caucasian females. Results demonstrated that exploration in depth was positively related to commitment making, identification with commitment, and adjustment dimensions such as self-esteem and academic and social adjustment. Furthermore, commitment making, exploration in depth, and identification with commitment were associated with a supportive, nurturant parent-adolescent climate. Taken together, these results indicate that the process of identity exploration generally occurs before identity commitment, and that identity exploration reflects the extent to which an individual is actively considering and talking with others about various identity commitments (Luyckx et al., 2006).

Identity exploration in particular is viewed as a process which can be enacted within relationships (e.g., Kerpelman, Pittman, & Lamke, 1997). In earlier work, Grotevant and Cooper (1985) explored how interaction patterns in family relationships would be associated with identity exploration in adolescence. More specifically, Grotevant and Cooper predicted that individuation dimensions of self-assertion, separateness, permeability, and mutuality in the family would be positively related to identity exploration in adolescence. In this study, Grotevant and Cooper observed family interactions during a problem-solving task and completed interviews with 84 Caucasian families, each with two parents and at least one adolescent child. Results indicated that all of the individuation dimensions in family interactions were associated with identity exploration in adolescence. In particular, a balance of individuality (self-assertion and separateness) and connectedness (permeability and mutuality) in the parent-adolescent relationship was associated with higher levels of adolescent identity exploration. Overall,

the results of this study suggest that interpersonal relationships, such as relationships with parents, are a highly relevant context for adolescent identity exploration.

Although Erikson and Marcia focused on identity development as it pertains to occupational choice and religious and political ideology, Erikson's and Marcia's theories were grounded in the idea that identity is formed in relational, cultural, and social contexts (Schwartz, 2001). As such, these theories also have been used to investigate identity formation more specifically in the interpersonal domain, such as in friendships, family relationships, dating relationships, and sex roles (Schwartz). The interpersonal domain of identity development involves identity-relevant beliefs about the self with regard to interpersonal relationships (Thorbecke & Grotevant, 1982), and therefore is distinct from the ideological domain, which includes contexts of ideology and vocational identity. Indeed, researchers have realized that even the processes of identity exploration and identity commitment may operate differently in ideological and interpersonal domains (Schwartz). In particular, Thorbecke and Grotevant (1982) brought attention to the interpersonal domain of adolescent identity formation by highlighting this domain in their empirical study examining gender differences in interpersonal identity formation during adolescence.

In this study, Thorbecke and Grotevant (1982) used interviews and surveys to assess progress toward interpersonal identity development in the contexts of dating relationships and friendships for 41 male and 42 female high school juniors and seniors. The researchers also measured vocational identity development, psychological masculinity and femininity, and achievement motivation. The data in this study yielded several interesting results, as Thorbecke and Grotevant found that expressive attributes,



an aspect of psychological femininity, were positively associated with interpersonal identity exploration for both males and females. Furthermore, although females were significantly more achieved in the friendship context of interpersonal identity development, there were no significant differences between males and females in terms of identity achievement in the interpersonal identity development context of the dating relationship. Taken together, these findings highlight the importance of examining interpersonal identity formation for understanding identity outcomes in both males and females during adolescence.

Grotevant, Thorbecke, & Meyer (1982) further expanded research in the realm of adolescent interpersonal identity formation in their study developing a measure of interpersonal identity status. By adapting Marcia's Identity Status Interview to apply to the interpersonal domain contexts of friendships, dating relationships, and sex roles, Grotevant et al. devised an assessment of identity status which could be used in research addressing the interpersonal domain of identity formation. The researchers administered their interview to a sample of 41 male and 40 female high school juniors and seniors, and found acceptable levels of interrater reliability using the modified Identity Status Interview. Hence, the development of the expanded identity status interview paved the way for future studies to be able to assess identity status more fully by including the interpersonal domain of identity.

Although findings from Thorbecke and Grotevant (1982) and Grotevant, Thorbecke, and Meyer (1982) helped spur greater empirical and theoretical interest in the interpersonal domain of adolescent identity formation during the following decade, research in this area has remained sparse. In fact, careful review of empirical and

theoretical literature yielded approximately nine additional articles currently published that specifically examined interpersonal identity formation during adolescence (i.e., Allison & Schultz, 2001; Archer, 1992; Bartle-Haring, 1997; Branch & Boothe, 2002; Forbes & Ashton, 1998; Kerpelman & White, 2006; Markstrom-Adams & Adams, 1995; Patterson, Sochting, & Marcia, 1992; Zimmer-Gembeck & Petherick, 2006). Although only two of these studies focused on interpersonal identity development within the dating context, each of these studies or reviews is important for understanding general interpersonal identity formation during adolescence.

In her theoretical review article, Archer (1992) emphasized feminist concerns regarding definitions of identity, identity methodology, and the significance of social context. Archer noted in this article that separating identity development from intimacy and from interpersonal relationships is akin to the dichotomizing of masculinity and femininity. Some researchers have believed that being self-defined with regard to identity is separate from being intimately connected with others. However, Archer asserted that interpersonal processes are actually essential for identity development, and global identity cannot truly be assessed without examining identity development within the interpersonal domain. In fact, Archer stated that investigating identity formation specifically in each domain would help researchers to discover and understand differences in identity formation processes and outcomes according to gender, age, ethnicity, and socioeconomic status. Archer also pointed out that connection and interaction with others affects identity development in both the interpersonal and ideological domains. Finally, Archer noted that the social context of identity development

for both males and females in the ideological and interpersonal domains should not be ignored in future research.

Bartle-Haring (1997) examined the process of identity formation among adolescents by comparing whether certain predictors would be similarly related to ideological and interpersonal identity formation. The author expected that both sex role orientation and differentiation in the father-adolescent or mother-adolescent relationship, as indicated by perceptions of tolerance of the parent for both intimacy and individuality in the parent-adolescent relationship, would be related to ideological and interpersonal identity status. The author tested this theoretical model among 105 female and 58 male college students, of whom 95% were Caucasian, with the majority from middle-class or upper-middle class two-parent families. Overall, Bartle-Haring found that sex role orientation and differentiation in the parent-child relationship were dissimilarly related to the ideological and interpersonal identity statuses, indicating that there may be different developmental pathways for these two domains of identity formation. For example, while the model proposed by the author explained 4.8% of the variance in ideological identity status for females and 29% of the variance in ideological identity status for males, the hypothesized model accounted for 15.8% of the variance in interpersonal identity status for both males and females. This study reiterates the idea that research specifically focusing on adolescent identity development in the interpersonal domain is important for understanding general identity formation.

In their critique of identity theory, Patterson, Sochting, and Marcia (1992) also highlighted discrepancies in the manner in which Eriksonian theories of identity development approach identity formation in males and females. Patterson et al. noted that

research has shown that interpersonal concerns are closely connected to other contexts of identity development for women, such as occupational identity. Therefore, Patterson et al. proposed that identity development may operate differently over time for females and males. Patterson et al. also asserted that interpersonal identity is not only a major domain of identity development, but that interpersonal relationships and connectedness are a fundamental part of identity formation and thus are vital to the very definition of identity. Finally, Patterson et al. suggested that future research should explore the ways in which interpersonal processes affect identity formation for males as well as for females.

In order to help answer this research call and explore how interpersonal processes might influence identity formation, Zimmer-Gembeck and Petherick (2006) examined associations among the variables of intimacy dating goals, vocational identity (ideological domain), and sex role identity (interpersonal domain) in their study of relationship satisfaction during adolescence and early adulthood. The researchers hypothesized that intimacy dating goals would be linked with age, gender, relationship satisfaction, and development of both the vocational and sex role identities. To test these hypotheses, the researchers surveyed 242 university students aged 17 to 21, of whom the majority (87%) were Caucasian and over half of whom were in a steady romantic relationship at the time the study was conducted. Findings indicated that sex role identity formation was associated with intimacy dating goals; however, vocational identity formation was not. Furthermore, both vocational and sex role identity formation moderated the association and between intimacy dating goals and relationship satisfaction. These results show that interpersonal process indicators of intimacy and

relationship satisfaction are indeed related to identity formation, especially with regard to the interpersonal domain context of sex role identity.

Markstrom-Adams and Adams (1995) compared interpersonal and ideological identity formation during middle adolescence by surveying 123 Caucasian, African American, Mexican American, and American Indian high school students regarding identity status, personal attributes, and locus of control. This study was important for expanding knowledge regarding interpersonal identity formation in adolescence. Because the sample was taken from among high school students instead of college students, it incorporated information about identity formation during middle adolescence into a research literature that has focused primarily on late adolescence. Overall, the researchers did not find any significant differences by ethnicity in interpersonal identity development, although males were somewhat more likely to be diffused in interpersonal identity than were females. These findings suggest that interpersonal identity formation is a salient psychosocial process among adolescents from a range of ethnic backgrounds.

In their investigation of interpersonal identity formation, Allison & Schultz (2001) helped expand identity formation research among early and middle adolescents by examining gender and age predictors of interpersonal identity status among 356 adolescents aged 10 to 14 of various ethnicities. Results based on participants' responses to issues concerning interpersonal experiences showed that interpersonal identity formation was salient among both male and female adolescents in early adolescence, and that interpersonal identity formation was more salient at older age levels within this age range. Allison and Schultz were able to show that issues regarding friendships, dating,

and sex roles in interpersonal identity formation are quite salient to both male and female early adolescents.

Forbes and Ashton (1998) examined adolescent interpersonal identity formation among middle and late adolescents in their study of identity development among 48 African American high school students. In particular, the authors of this study sought to explore identity status among African American middle adolescents, since previous research had largely neglected the study of identity development among this population. Forbes and Ashton found that the majority of participants in this study had not resolved the identity crisis through identity commitment. That is, the majority of participants were classified as in the moratorium status in both the ideological and interpersonal identity domains, indicating that these adolescents were experiencing active identity exploration in the interpersonal domain during middle adolescence.

Branch and Boothe (2002) further examined adolescent interpersonal identity formation in their replication of the Forbes and Ashton (1998) study, also using a sample of 77 African American middle and late adolescents. Branch and Boothe (2002) found that the majority of adolescents were not experiencing identity foreclosure in either the ideological or interpersonal identity domains. That is, adolescence is generally a time of identity exploration for African-American youth in both of these major identity domains, as has been found in previous research using mainly Caucasian adolescent samples.

Kerpelman and White (2006) conducted a somewhat more detailed study of interpersonal identity formation among African American early and middle adolescents by examining associations between interpersonal identity formation and the perception of social capital quality among 374 African American adolescents in grades 7-12 from low

income, rural backgrounds. The researchers believed that interpersonal identity statuses associated with higher levels of commitment (i.e., foreclosed and achieved identity statuses) would be positively related to self-perceptions of social capital quality, because interpersonal identity formation involves gaining an understanding of self in relation to others. The findings of this study supported the hypotheses of the researchers, as both foreclosed and achieved interpersonal identity status were significantly related to social capital quality. These findings indicate more generally that interpersonal identity formation is important for other aspects of social development during adolescence.

Taken together, this set of empirical studies and literature reviews demonstrates that interpersonal identity formation is a salient and significant aspect of adolescent psychosocial development, and factors such as age and gender may be related to how the process of identity development that occurs among adolescents. Identity formation in the interpersonal domain contexts of friendships, dating relationships, and sex roles also appears to develop somewhat distinct from identity formation in the ideological domain, such as the finding by Bartle-Haring (1997) that sex role orientation and differentiation in the parent-child relationship were not identically related to interpersonal and ideological identity formation. However, little is known about how the processes of exploration and commitment operate within the interpersonal identity domain. Because of the relevance of identity exploration during adolescence, it is imperative that future research investigate interpersonal identity exploration, especially within normative contexts such as dating relationships. Furthermore, research regarding the process of identity exploration should seek to further clarify how variables such as age and gender are related to identity formation in the interpersonal domain during adolescence.

### *Intimacy in Adolescent Romantic Relationships*

Given the influence and more widespread occurrence of romantic relationships among adolescents, it is especially important to examine identity formation and identity exploration within the interpersonal identity domain of adolescent romantic relationships. As Sieffge-Krenke (2003) and Levesque (1993) noted, romantic relationships during middle and late adolescence begin to look more like adult romantic relationships in dimensions of affection, intimacy, and duration. Although Erikson (1968) would suggest that true intimacy cannot be achieved until after the majority of identity formation work has been completed, researchers are beginning to explore how intimacy may be relevant to adolescent development even before firm identity commitments have been made. Thus, although intimacy is believed to develop after significant identity formation has occurred, initial development of intimacy in romantic relationships may occur in conjunction with identity development (Montgomery, 2005). That is, while identity development addresses who an individual is, intimacy development addresses how the individual is known by others, particularly significant others within the romantic relationship domain (Dyk & Adams, 1987).

Montgomery (2005) found support for linkages between and variability within psychosocial identity and psychosocial intimacy across age and gender. Montgomery expected that identity would positively predict intimacy, but that both intimacy and identity would be successively greater (i.e., more developed as evidenced by higher scores on both the identity and intimacy subscales of a psychosocial functioning measure) when comparing early adolescents, middle adolescents, and young adults. Furthermore, the author expected that females would have higher intimacy scores than males would.



Montgomery examined these hypotheses by surveying a primarily White sample of middle school adolescents, high school adolescents, and emerging adults in college from various youth organizations, private schools, and public schools.

Montgomery (2005) found that the development of intimacy in romantic relationships does indeed begin during adolescence, and that this development is a multifaceted process which occurs across a number of behavioral, cognitive, and affective domains. In addition, results also indicated that while identity formation and development of intimacy in romantic relationships are distinct processes, these processes are interrelated, suggesting that intimacy development begins before identity formation work has been completed. Identity and intimacy scores were higher in older age groups, indicating that adolescents experience higher levels of continuity between psychological and interpersonal aspects of the self as they grow older (Montgomery). However, although differences in scores across age groups for females in both intimacy and identity were significant, differences in both intimacy and identity scores were not significant for males across age groups. The author suggested that these results may have occurred because males often are not encouraged in the same way girls are to develop a sense of intimacy.

In order to explore more specifically the differences in the nature of adolescent romantic relationships with regard to intimacy by gender and dating experience across age groups, Shulman and Scharf (2000) investigated romantic perceptions and behaviors during adolescence and how relationships with both parents and peers may influence these perceptions and behaviors. The researchers expected that, in line with previous research, adolescent romantic relationships would take on more qualities of caregiving

and intimacy among older adolescents, whereas younger adolescents would seek more companionship in their romantic relationships. In order to answer their research questions, the authors used questionnaires and interviews to gather information on adolescent romantic relationships among 168 Israeli high-school adolescents.

Shulman and Scharf (2000) found that the romantic relationship was experienced as a caregiving relationship during all stages of adolescence, and that intimacy and attachment were principal values in romantic relationships across the stages of adolescence. However, dimensions of friendship and companionship were more pronounced in younger adolescent romantic relationships than in romantic relationships of older adolescents, whereas older adolescents emphasized romantic relationship functions of comfort, support, and caregiving more than younger adolescents did. Furthermore, females in each age group of adolescents reported higher levels of affective intensity, support, and caregiving than did boys. In addition, affective intensity with a romantic partner was linked to quality of peer relationships, but was not significantly associated with quality of relationships with parents. Taken together, these results confirm that intimacy in romantic relationships is indeed developing during adolescence.

Because intimacy is still developing in adolescent romantic relationships, intimacy in these relationships may be more effectively conceptualized as *comfort with intimacy* in the romantic relationship, which can be defined as being comfortable with closeness in the romantic relationship, trusting the romantic partner, and believing that the romantic partner can be depended on and is available (Davila & Kashy, 2009). That is, intimacy that has not reached maturity might best be examined by looking at the extent to which a person expresses openness to and capacity for emotional connectedness with a

partner, because attaining intimacy inherently requires the individual to value and attempt to achieve closeness (Collins & Sroufe, 1999). Hazan and Shaver (1987) examined how attachment in romantic relationships affects such behavior as seeking closeness in romantic relationships by using a self-report measure of attachment in adolescent and adult romantic relationships. Believing that attachment in adult and adolescent romantic relationships would parallel secure, anxious, or avoidant attachment patterns in infancy, the researchers found that attachment style in romantic relationships predicted love experiences. That is, for both adolescents and adults in romantic relationships, this study found that secure romantic attachment was linked with friendly, happy, and trusting romantic experiences, whereas avoidant romantic attachment was associated with fear of closeness and discomfort with intimacy, and anxious or ambivalent romantic attachment was predictive of experiences of jealousy and emotional extremes. These findings appear to be highly relevant for understanding how security, anxiety, and avoidance in romantic relationships may serve as a marker for the individual's comfort with intimacy.

In order to further test associations between romantic attachment and romantic experiences among adolescents and young adults, Brennan, Clark, and Shaver (1998) developed a more refined measure of romantic relationship attachment. Piloting their romantic attachment measure with 1,086 undergraduate college students ranging in age from 16 to 50, the researchers assessed attachment along dimensions of avoidance and anxiety. In the resulting measure, the avoidance scale was strongly associated with other scales measuring avoidance and discomfort with closeness, while the anxiety scale was highly correlated with scales measuring anxiety, preoccupation with attachment, jealousy, and fear of rejection. Overall, the Experiences in Close Relationships measure developed

by Brennan et al. had high internal consistency and therefore is considered more precise than earlier scales.

Although attachment security in general is “conducive to intimacy; sharing; considerate communication; and openness to sexual exploration” (Tracy et al., 2003, p.141), the sort of attachment which will be discussed here is only that of romantic partner attachment, which in research on adult romantic attachment is concerned with the beliefs that adults have about how they behave in romantic relationships (Shaver, Belsky, & Brennan, 2000). This perspective in the study of attachment is different from the developmental perspective put forth by Bowlby (1988), whereby patterns of interaction with the primary caregiver in infancy lead to patterns of infant attachment, which along with environmental and genetic influences predict various outcomes throughout the lifespan (Obegi et al., 2004).

Maysel and Scharf (2007) explored the influences of attachment style in current close relationships and “state of mind” regarding attachment to parents (i.e., general descriptions of past attachment-related experiences and in specific events with parents) in childhood as major factors contributing to capacity for intimacy in adolescence, because research has suggested that both types of attachment may contribute to intimacy with friends and romantic partners. The authors hypothesized that state of mind regarding attachment and romantic attachment styles each would uniquely predict capacity for intimacy in romantic relationships and friendships of late adolescents. The authors also expected the temperament aspect of impulsiveness to interact with attachment security, such that higher impulsiveness scores would hinder capacity for

intimacy in secure individuals but higher impulsiveness scores would enhance capacity for intimacy in anxious and avoidant individuals.

Using the Adult Attachment Interview (Main & Goldwyn, 1998) to assess state of mind with respect to attachment and the Attachment Style Questionnaire based on Hazan and Shaver's (1987) research to assess attachment styles, Mayseless and Scharf (2007) conducted a four-year longitudinal study testing their hypotheses among Israeli male adolescents. In their analysis, the authors found that both state of mind with regard to attachment and romantic attachment style during adolescence each predicted capacity for intimacy four years later, with secure adolescents being more likely to report higher intimacy in their romantic relationships than were anxious or avoidant adolescents. However, state of mind with regard to attachment and attachment style were not significantly related to each other, and attachment style was not predictive of capacity for intimacy in friendships, indicating that state of mind with regard to attachment is a more general predictor of intimacy in various types of close relationships while attachment style more specifically predicts intimacy in romantic relationships. In addition, impulsiveness was related to avoidant and ambivalent attachment styles, but did not influence intimacy. Overall, the results of this study show that, for adolescents and young adults, attachment style in close relationships is a major factor for understanding development of intimacy in these relationships, especially in romantic relationships. That is, attachment specifically pertaining to the romantic relationship is perhaps the best indicator of comfort with intimacy within that relationship.

Taken together, this set of studies demonstrates that romantic attachment dimensions of anxiety and avoidance are unique indicators of comfort with intimacy in

adolescent romantic relationships. However, it is notable that several of these studies have been conducted using European samples, bringing to light the need to undertake such studies with samples in the United States in order to better understand adolescent romantic relationships within this country. Although most measures of romantic attachment are designed to measure attachment security in adult romantic relationships, measures such as the Experiences in Close Relationships (ECR; Brennan, Clark, & Shaver, 1998) also have been used successfully among adolescents. Therefore, measures such as the ECR are useful for assessing how comfort with intimacy may affect other interpersonal processes in adolescent romantic relationships and general processes of adolescent psychosocial development, such as identity formation. Finally, it is evident from the studies reviewed here that effects of variables such as age, gender, and dating experience, and should be taken into account when investigating associations involving comfort with intimacy.

### *Intimacy and Identity*

Based on the current research showing that both identity and intimacy are developing during adolescence, it seems likely that intimacy may influence (and be influenced by) the central psychosocial task of identity development during this age period. Dyk and Adams (1987) suggested that intimacy is linked to identity formation in adolescence because it is through intimacy in relationships that the individual develops and puts into practice a variety of skills and strategies for sharing or conveying the self. In fact, Montgomery (2005) asserted that intimacy may serve as a foundation or support for personal identity, even beginning in early adolescence when identity has not yet been clarified. Indeed, as noted earlier, results of Montgomery's study of the development of

psychosocial intimacy and psychosocial identity formation supported the claim that intimacy development begins before identity formation is complete (Montgomery).

The links between identity and intimacy also were explored in greater detail by Seginer and Noyman (2005) in their study of the relationship between future orientation, identity, and intimacy among college students in Israel. Because both identity and intimacy involve aspects of connectedness and individuality, the authors believed that identity development, intimacy, and future orientation (as measured by behavioral and motivational variables including exploration and commitment) would be positively related with each other. After surveying 145 Israeli college students, the authors found that identity was related to the future orientation process of commitment, however, intimacy was related to the future orientation process of exploration. In discussing these results, Seginer and Noyman noted that the association between identity exploration and intimacy suggests that intimacy may itself be considered an aspect of exploring the self, the romantic partner, and the relationship.

Although the participants in this study were young adult college students, the results of Seginer and Noyman's (2005) study support theoretical assertions made by Adams and Archer (1994) that intimacy and identity are related during adolescence. That is, Adams and Archer stated that an identity which has been actively selected will predict greater depth, quality, and intimacy in interpersonal relationships. Adams and Archer based these conclusions on the research of Dyk and Adams (1990), who investigated the associations between intimacy and identity among 142 college students over a five-week time span. Using subscales of the Erikson Psychosocial Stage Inventory Scale (EPSI; Rosenthal, Gurney, & Moore, 1981) to assess levels of both intimacy and identity, the

researchers found that over the five-week period, identity development did precede intimacy development for both males and females. However, although identity formation is considered a precursor intimacy, intimacy development is at least in its beginning stages during what Erikson (1968) would call the identity development “crisis” of adolescence. Therefore, it is to be expected that intimacy during adolescence would influence identity development during this time period, especially affecting the formation of the *dating partner identity*.

Research has established that there are connections between intimacy and identity development in general, however, links between the more specific constructs of romantic relationship attachment and identity development during adolescence have been relatively unexplored. Berman et al. (2006) note that while numerous studies have reported a link between infant-caregiver attachment and level of identity development, very few studies have examined links between romantic attachment and identity development, though there is theoretical and even some empirical support for such an association (e.g., Berman et al., 2006; Dyk & Adams, 1990; Hoegh & Bourgeois, 2002; Kennedy, 1999; Reich & Seigel, 2002; Seginer & Noyman, 2005). Although such studies are scant, research with adolescents regarding romantic attachment have demonstrated that adolescent romantic relationships do tend to take on increasingly more attachment-like qualities of support, comfort, and care during middle adolescence, late adolescence, and early adulthood (Seiffge-Krenke, 2003). Furthermore, measures of adult romantic attachment, which have been adapted or used with adolescents such as the Experiences in Close Relationships attachment measure, have demonstrated acceptable validity in measuring attachment security in middle adolescent and late adolescent romantic



relationships (e.g., Berman et al, 2006; Rodrigues & Kitzmann, 2007; Crawford et al, 2006). However, even the studies referenced above have not specifically examined the relationship between dating partner identity exploration and the romantic attachment subscales of anxiety and avoidance.

For example, Berman, Weems, Rodriguez, and Zamora (2006) tested associations between identity status and attachment by using the Experiences in Close Relationships (ECR; Brennan et al., 1998) instrument to measure anxiety and avoidance in romantic relationship attachment of adolescents and young adults. The researchers found that those with diffuse identities were significantly more likely than those with foreclosed identities to have higher levels of avoidance in romantic attachment, and those with foreclosed identities also were more likely to have lower levels of anxiety in romantic attachment than those whose identities were in moratorium or were achieved. In addition, associations were much stronger among college students than among high school students included in the study. These results indicate that the relationship between identity and romantic attachment dimensions of anxiety and avoidance during adolescence and young adulthood is indeed complex. Furthermore, in order to better understand associations among identity and romantic attachment, identity should not only be conceptualized in terms of identity status but also should be examined along the dimensions of exploration and commitment, especially if researchers wish to discover the nature of the association between identity and intimacy during adolescence.

A few other studies also have examined associations between romantic attachment and identity development, although these studies either examined identity in terms of identity status or in terms of ego development (Hoegh & Bourgeois, 2002;

Kennedy, 1999; Reich & Seigel, 2002). For example, Hoegh & Bourgeois (2002) surveyed 79 undergraduate students and found that attachment style was related to identity status, as individuals with achieved identities or identities in moratorium exhibited the highest levels of secure attachment. These results are important because, according to Marcia (1966), achieved and moratorium identity statuses are the identity statuses that are high in exploration, indicating that romantic attachment may be more specifically linked to identity exploration. Although Kennedy's (1999) study of 225 college freshman revealed that participants with anxious attachment styles were more likely to have higher levels of identity diffusion and moratorium than were participants with secure attachment styles, the Hoegh and Bourgeois and the Kennedy studies cannot be easily compared because of the differing ways variables were measured.

Taken together, findings regarding the relationship between romantic attachment and identity indicate that the association between these constructs should be examined using measurement instruments that will better assess relevant dimensions of romantic attachment and identity development. That is, because studies exploring associations between romantic attachment and identity development have yielded significant yet mixed results, subsequent research should seek to clarify the relationship between romantic attachment and identity development in adolescence by assessing how the romantic attachment dimensions of anxiety and avoidance may influence the dimensions of commitment and exploration in identity development.

#### *Parental Warmth and Support*

Given the primacy and importance of parent-adolescent relationships for adolescents' relationship development in other contexts, it is important to consider how

the quality of the parent-adolescent relationship may affect comfort with intimacy during adolescence, as well as exploration of the dating partner identity. Although adolescence is recognized as a time during which relationships with parents undergo dramatic changes as adolescents seek autonomy (e.g., Furman & Shaffer, 2003; Gray & Steinberg, 1999), researchers suggest that relationships with parents may play an important part in the development of adolescent romantic relationships (Smetana, Campione-Barr, & Metzger, 2006).

For example, Connolly and Johnson (1996) examined links between adolescent romantic relationships and the structure and quality of parent-adolescent relationships in their study on the influences of close interpersonal relationships on romantic relationships in adolescence. Using survey data collected from over 1,000 adolescents, the authors found that support in the parent-adolescent relationship was consistently correlated with support in the adolescent romantic relationship. In fact, perceived social support in the parent-adolescent relationship was more strongly associated with perceived social support in the romantic relationship than was perceived social support in the best friend relationship for adolescents whose romantic relationships were of short to middle duration (i.e., up to 11 months in length). These results especially are interesting considering findings of Carver et al. (2003) indicating that that from 20% of early adolescents to 60% of late adolescents say that their dating relationships have lasted at least 11 months. Furthermore, these results indicate that support in the parent-adolescent relationship may influence dimensions relevant to comfort with intimacy in the adolescent romantic relationship.

In one longitudinal study which examined the development of romantic relationships during adolescence and early adulthood, Seiffge-Krenke, Shulman, and Klessinger (2001) explored factors during adolescence which contributed to later romantic relationship outcomes. In particular, the authors believed that since adolescent romantic relationships gradually begin to resemble adult romantic relationships in terms of serving attachment needs of support and caregiving, experiences in close relationships with parents and friends during adolescence would affect later romantic relationship experiences. The authors hypothesized that quality of relationships with parents and with friends and parental marital status would affect quality of romantic relationships during early adulthood.

The researchers tested their hypotheses by surveying a sample of 72 West German male and female adolescents four times over the course of six years. The researchers found that both marital status of parents (i.e., parents being married to each other instead of divorced or single) and better quality of relationships with parents were related to greater connectedness and attraction in later romantic relationships for the adolescents. The results of this study clearly support the idea that parental marital status during adolescence and parent-adolescent relationship quality may affect the adolescents' romantic relationships during young adulthood (Seiffge-Krenke et al., 2001). Although it logically follows that parental marital status and parent-adolescent relationship quality would also influence romantic relationships during adolescence, connections among these factors during adolescence need to be clarified.

Although theoretical work has suggested that infant attachment to the caregiver sets the stage for anxiety and avoidance in attachment to the romantic partner (Hazan &

Shaver, 1987), other research has found that, in adolescence, models of parent-child attachment and romantic relationship attachment are inconsistently related (Furman, Simon, Shaffer, & Bouchey, 2002). In their study comparing adolescent representations of the parent-child relationship, close friendships, and romantic relationships, Furman et al. interviewed 68 high school students aged 16 to 19 regarding their childhood relationships with parents and their current relationships with close friends and romantic partners. The researchers also assessed current self-perceptions of relational styles with parents, friends, and romantic partners, as well as current perceptions of experiences in close relationships with parents, friends, and romantic partners regarding dimensions of support, intimacy, and conflict using survey instruments.

The findings of this study by Furman et al. (2002) indicated that working models of adolescent romantic relationships were not consistently correlated with working models of parent-child relationships, although views of relationships with parents during childhood were related to views of relationships with friends. Hence, attachment in infancy is not a reliable predictor of romantic relationship attachment during adolescence. However, the researchers did find that current parental support (i.e., communication, seeking support, and providing support) was significantly associated with support in relationships with romantic partners and close friends. Interestingly, support in relationships with romantic partners and close friends were not significantly correlated with each other. Overall, these results show that assessment of current support and closeness in the parent-adolescent relationship may be much more relevant for understanding intimacy in adolescent romantic relationships than would assessment of attachment in infancy. Dimensions of parent-adolescent relationship quality may be

better predictors of aspects of anxiety, avoidance, or intimacy in adolescent romantic relationships than infant attachment.

Using a developmental approach, Conger, Cui, Bryant, and Elder (2000) investigated how interactions in the family of origin, especially those with parents, might influence outcomes in adolescent and early adult romantic relationships. Basing their hypotheses on the idea that parents may model romantic relationship behaviors and socialize children in ways that enhance relationship skills, Conger et al. believed that interactional processes with parents would predict interpersonal skills of adolescents, which in turn would predict relationship quality among early adult romantic couples. In order to test their hypotheses, the researchers conducted a longitudinal study of 193 7<sup>th</sup>-grade adolescents, following these adolescents and their families into early adulthood.

Conger et al. (2000) found that nurturant-involved parenting in the family of origin during adolescence, as indicated by high levels of parental warmth and support and low levels of hostility, coercion, and harsh or inconsistent parenting, was significantly associated with behaviors toward the romantic partner in early adulthood that were warm, supportive, and low in hostility. Furthermore, these behaviors toward the romantic partner of warmth, support, and low hostility predicted overall relationship quality in the romantic relationship. Hence, parenting behaviors such as warmth and support during adolescence influenced warm and supportive behaviors of individuals in early adult romantic relationships. Therefore, it is likely that parental warmth and support affects comfort with intimacy in adolescent romantic relationships.

In addition, based on past work indicating that various aspects of parent-adolescent relationships may affect identity exploration (e.g., Grotevant & Cooper,

1985), it is expected that parental warmth and support also may be positively associated with dating partner identity exploration by providing a context in which the adolescent can explore various views and perceptions, including perceptions of the self. For example, Grotevant and Cooper found that certain family interaction styles and communication patterns of parental permeability (i.e., responsiveness to others' views) and mutuality (i.e., sensitivity and respect for others' views) were positively linked with higher levels of adolescent identity exploration in depth and in breadth. Also, as noted previously, Luyckx et al. (2006) found that a supportive, nurturant parent-adolescent environment was associated with in-depth exploration of identity among late adolescent and early adult college students, as the parent-adolescent relationship appeared to provide a context for the adolescent to reflect on various identity choices and commitments. Thus, it seems plausible that parental warmth and support also may be associated positively with identity exploration. That is, although such a connection between parental warmth and support and dating partner identity exploration among high school adolescents has not been specifically examined in previous research, exploration of associations between these variables are expected to yield significant positive associations according to links between parent-adolescent relationship quality and exploration of identity which have been suggested in prior research on young adults.

Because parent-adolescent warmth/support has been shown to be linked with intimacy in adolescent and young adult romantic relationships and is believed to have some influence on identity formation during adolescence, it is also possible that comfort with intimacy may serve as a mediator of the hypothesized relationship between parental warmth/support and dating partner identity exploration. That is, parental warmth/support

may directly influence comfort with intimacy, which in turn is expected to directly predict dating partner identity exploration. Thus, parental warmth/support may influence dating partner identity exploration both indirectly and directly.

Dekovic and Meeus (1997) tested a similar hypothesis in their study of the effects of parent-child relationship quality and self-concept on adolescents' relationship with their peers. The authors of this study based their hypothesis on literature demonstrating that warm and supportive parenting is linked with self-esteem and with exploration of personal competencies, which are integral components of self-concept development (Dekovic & Meeus). The authors also believed that both parent-adolescent relationship quality as well as components of self-concept such as self-esteem and competency would be linked with the development of satisfactory peer relationships. After testing this hypothesis by surveying mothers, fathers, and adolescents aged 12 to 18 in 508 Dutch families, the authors found that both parental warmth and support and positive self-concept contributed directly to satisfaction in peer relationships.

#### *Summary of Study Goals*

Overall, based on the findings in the studies reviewed, it seems likely that parental warmth/support may have an important effect on both comfort with intimacy in the adolescent romantic relationship and on exploration of the dating partner identity. Furthermore, it is plausible that comfort with intimacy may serve as a mediator of the relationship between parental warmth/support and dating partner identity exploration. Therefore, this study will consider the influence of parental warmth/support when examining the relationship between comfort with intimacy in the adolescent romantic relationship and dating partner identity exploration while controlling for factors such as



age, gender, dating experience and parental marital status. It is expected that comfort with intimacy (i.e., low levels of romantic relationship anxiety and avoidance) will predict greater exploration of the dating partner identity. It is also expected that higher levels of warmth/support in the parent-adolescent relationship will predict lower levels of anxiety and avoidance in adolescent romantic attachment (i.e., greater comfort with intimacy), as well as higher levels of dating partner identity exploration. It is also expected that comfort with intimacy will mediate the relationship between parental warmth/support and dating partner identity exploration.

## METHODS

### *Sample and Procedure*

The sample for the current study participated in 2007 (N=1720) in the Healthy Couples, Healthy Children: Relationship Smarts (HCHCTY) study. This five-year federally funded project addresses the effectiveness of a youth-focused relationships education curriculum. The data for this study were collected before any program intervention implementation. Surveys used in this study were created by the Principal Investigators of the HCHCTY project. For inclusion in the study, participants were required to be adolescents in grades 9-12 in an Alabama public high school enrolled in a Family and Consumer Science course taught by a participating teacher. Teachers distributed and collected the surveys and mailed the completed surveys to the Principal Investigators in a postage paid envelope. For the current study, the sample was reduced to those adolescents who reported being in a current dating relationship (N=882). In this sub-sample, 82.4% of participants were female and 55.9% of sample participants were European American; 39.8% of participants were African-American, 1.4% of participants were Hispanic, 0.3% of participants were Native American, and 2.8% of participants were classified as “other (e.g., mixed race). The average age of sample participants was approximately 16.6 years old (SD = 1.24). The adolescents lived in varied family structures; 29.7% of participants reported living with a single parent (never married or divorced), 31.9% reported living with both original (biological or adoptive) parents, and

25.6% reported living with an original (biological or adoptive) parent and a stepparent. The remaining 12.8% of adolescents reported living with a relative but not a parent (e.g., a grandparent, aunt, uncle, sister, etc.) or reported living with “other,” such as living in foster home or living with a guardian. The participants reported an average of 4.5 dating partners (SD=3.31) in their lifetimes.

*Measures (see Appendix A)*

*Relationship Anxiety and Avoidance (Comfort with Intimacy).* The anxiety and avoidance dimensions of the Experiences in Close Relationships scale (ECR; Brennan, Clark, & Shaver, 1998) were used in the current study. Brennan et al. found good reliability for the anxiety ( $\alpha = .91$ ) and avoidance ( $\alpha = .94$ ) subscales. For the current study, nine items for each subscale were used. The nine items for each subscale were selected based on a previously conducted exploratory factor analysis (EFA) with a sample of 294 college students.

The 9 selected avoidance items were the high loading items on the first factor of the EFA. They had an alpha of 0.89 and captured 93% of the variance of the original 18 items. A separate EFA was conducted for the anxiety subscale. The nine selected anxiety items again were the high loading items on the first factor. They had an alpha of 0.86 and captured 93% of the variance of the original 18 items.

For the anxiety dimension, each of the nine questions from this subscale was scored on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Example items include: “I worry that romantic partners won’t care about me as much as I care about them,” and “I worry a fair amount about losing my partner.” Acceptable reliability was found for the relationship anxiety scale in the current sample ( $\alpha=.79$ ). For

the avoidance dimension of the ECR, each of the nine questions from this subscale was scored on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Example items include: "I want to get close to my partner, but I keep pulling back," and "I prefer not to show a partner how I feel deep down." Reliability for the relationship avoidance scale in the current sample was acceptable ( $\alpha=.78$ ).

*Dating Partner Identity Exploration.* Exploration in depth of the dating partner identity was measured using the relational exploration in-depth subscale of the Utrecht-Management of Identity Commitments Scale (U-MICS; Crocetti, Rubini, & Meeus, 2008). Each of the five questions from this subscale was scored on a 5-point Likert scale ranging from 1 (completely untrue) to 5 (completely true). Crocetti et al. found good reliability for the relational exploration in depth subscale ( $\alpha=.84-.89$ ). Sample items include "I try to find out a lot about my relationship" and "I often try to find out what other people think about my dating relationship." Acceptable reliability for the exploration of relational identity scale was found in the current sample ( $\alpha=.71$ ).

*Quality of the Parent-Adolescent Relationship.* The five items of the Parental Warmth and Support subscale of the Quality of Relationship Inventory (QRI; Pierce, Sarason, & Sarason, 1991;  $\alpha=.83-.91$ ) were used to assess adolescents' perceptions of parental warmth/support.. Example items include being able to count on a parent's (or parent figure's) honesty, help, and advice. Items were responded to on a 4 point scale ranging from 1= "Not at all" to 4= "Very Much." Reliability in the current sample for the scale for parental warmth and support ( $\alpha=.89$ ) was high.

*Demographics.* Demographic variables in this study were age (continuous), gender (male=0, female=1), dating experience (total number of dating partners in the adolescent's lifetime), and parental marital status (married (first marriage), remarried, or single parent).

## RESULTS

### *Preliminary Analyses*

Indicators for each of the latent factors were determined. For parental warmth and support, the five items from the parental warmth/support subscale were used as indicators. For exploration of the dating partner identity, three of the five original items from the exploration in depth subscale were used. Finally, the nine items for romantic relationship anxiety and the nine items for romantic relationship avoidance were parceled into three indicators each for the anxiety and avoidance latent factors. Exploratory factor analysis was used to aid in identifying the best way to parcel the data (see Appendices B and C; see page 62 for discussion of this process in greater detail).

Means and standard deviations for the key study variables that included indicators for parental warmth/support, relationship anxiety, relationship avoidance, and identity exploration can be found in Table 1. Of the 13 retained variables, all but three had a skew statistic of less than 1; the largest skew statistic over 1 was 1.42. On average, the adolescents in the current sample scored in the middle or moderate range on parental warmth and support (2.89 to 3.31), high on dating partner identity exploration (4.0 to 4.3), low to moderate on anxiety (1.83 to 3.05), and low on avoidance (1.99 to 2.40).

### *Bivariate Correlations*

In order to ascertain whether the hypothesized associations among variables existed at the bivariate level, the zero-order correlations were examined (see Table 2).

Table 1.

*Means and Standard Deviations (N = 882)*

Variable	Mean (SD)
Parental Warmth 1	2.90 (0.99)
Parental Warmth 2	3.13 (0.96)
Parental Warmth 3	3.31 (0.95)
Parental Warmth 4	3.09 (1.04)
Parental Warmth 5	2.89 (1.09)
ID Exploration 1	4.30 (0.92)
ID Exploration 2	4.00 (1.04)
ID Exploration 3	4.20 (0.98)
ID Exploration 4*	2.96 (1.40)
ID Exploration 5*	3.49 (1.26)
Anxiety 1	3.05 (1.13)
Anxiety 2	2.76 (1.01)
Anxiety 3	1.83 (0.93)
Avoidance 1	1.99 (0.85)
Avoidance 2*	2.04 (1.06)
Avoidance 3	2.39 (1.15)

*Note.* Indicator variables marked with an asterisk were excluded from the models tested due to failure to adequately load on their respective latent factors as determined by the CFA.

Table 2.

*Bivariate Correlations (N = 882)*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
1. Age																				
2. Gender																				
3. Number of Partners																				
4. First Married vs. Other																				
5. Remarried vs. Other																				
6. Parental Warmth 1																				
7. Parental Warmth 2																				
8. Parental Warmth 3																				
9. Parental Warmth 4																				
10. Parental Warmth 5																				
11. ID Exploration 1																				
12. ID Exploration 2																				
13. ID Exploration 3																				



Table 2. (continued)

*Bivariate Correlations*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
14. Anxiety 1		-.09*	.07	-.03	.04	-.10**	-.09*	-.05	-.08*	-.07*	.08*	.01	.05					
15. Anxiety 2		-.02	.06	-.05	.06	-.10**	-.11**	-.08*	-.08*	-.09**	.05	.03	.04	.53**				
16. Anxiety 3		.07*	-.11**	.07	.02	.03	-.06	-.12**	-.13*	-.07*	-.09**	-.14**	-.11**	-.16**	.33**	.41**		
17. Avoidance 1		.04	.00	-.05	.00	-.03	-.05	-.06	-.08*	.01	-.21**	-.25**	-.26**	.26**	.22**	.41**		
18. Avoidance 2		-.07*	-.02	.03	-.04	.00	-.02	-.06	-.07*	.02	-.09**	-.15**	-.09*	.41**	.30**	.32**	.49**	

\* $p < .05$ , \*\* $p < .01$

Note. Two of the original dating partner identity exploration indicator variables and one of the original avoidance indicator variables is omitted due to being excluded from the model when the CFA indicated these variables did not load adequately on to their respective factors.

Overall, the indicators for each latent construct were significantly intercorrelated. That is, the indicators for each latent factor showed significant and positive associations.

Furthermore, the anxiety and avoidance indicators were significantly and positively associated with each other, and the avoidance indicators were significantly and negatively associated with the identity exploration indicators. Although one of the anxiety indicators was significantly and negatively correlated with all of the identity exploration indicators, the other two were not. Finally, the identity exploration indicators were significantly and positively associated with the parental warmth/support indicators. These associations are consistent with the hypothesized conceptual model.

After conducting the preliminary analyses, the hypothesized measurement and structural models were examined. Full information maximum likelihood (FIML) was used to manage missing data. Fit of the models was determined using chi square ( $\chi^2$ ),  $\chi^2$  to degrees of freedom (CMIN/DF), as well as the Tucker-Lewis Index (TLI), the Comparative Fit Index (CFI), and the root mean square error of approximation (RMSEA). The  $\chi^2$  indicates fit between the hypothesized model and the data. If the  $\chi^2$  is not significant, then the model is a good fit to the data. However, because the  $\chi^2$  is sensitive to sample size, the  $\chi^2$  is likely to be significant when fitting a model using sample sizes above about 200 cases, such as the size of sample included in this study. Therefore, other fit statistics also can be used to assess model fit. For example, the CMIN/DF statistic, which is the  $\chi^2$  divided by the degrees of freedom in the model, indicates adequate fit of the model when this statistic is less than 5. A CMIN/DF statistic smaller than 2 or 3 is considered an indicator of good model fit (Garson, 2006; Tabachnick & Fidell, 2001). Other indices of model fit include the TLI and the CFI ,

although these indices are influenced by the average size of the correlations in the hypothesized model (Bollen, 1990). The TLI is a relative fit index which is calculated by taking the ratios of the  $\chi^2$  of the hypothesized model, the  $\chi^2$  of the independence model, and the degrees of freedom in the hypothesized model (Bollen, 1989). The CFI is a non-centrality based index calculated using the  $\chi^2$  and degrees of freedom of both the hypothesized model and the null model (Bentler, 1990). Both TLI and CFI scores higher than 0.90 indicated adequate model fit, and TLI and CFI scores higher than 0.95 indicate good model fit (Bentler, 1990; Bollen, 1989). The RMSEA approximates the difference in model fit between a saturated model and the hypothesized model; therefore, smaller RMSEA values indicate better model fit than higher values. In particular, good model fit is indicated by a nonsignificant RMSEA smaller than 0.05, while adequate model fit is indicated by an RMSEA smaller than 0.08 (Browne & Cudeck, 1993). Lastly, the  $\Delta \chi^2$  test, which involves comparison between two different models of the  $\chi^2$  for each model, indicates a significant difference between models if the  $\Delta \chi^2$  is greater than the critical value based on degrees of freedom of the models being compared.

### *Measurement Model*

Latent factors were created for parental warmth/support, relationship anxiety, relationship avoidance, and dating partner identity exploration. These latent factors were then tested using confirmatory factor analysis (CFA; see Table 3). Each of the five indicators for parental warmth/support was used. However, for dating partner identity exploration, only three of the original five indicators loaded adequately onto dating

Table 3.

*Standardized Confirmatory Factor Analysis Loadings for Measurement Model (N = 882)*

Variable	Factor Loadings (All)	Factor Loadings (M1)
Parental Warmth		
Parental Warmth 1	0.79	0.79
Parental Warmth 2	0.86	0.86
Parental Warmth 3	0.70	0.70
Parental Warmth 4	0.81	0.81
Parental Warmth 5	0.80	0.80
Anxiety		
Anxiety 1	0.71	0.72
Anxiety 2	0.71	0.71
Anxiety 3	0.60	0.56
Avoidance		
Avoidance 1	0.77	0.70
Avoidance 2	0.36	-----
Avoidance 3	0.65	0.71
Dating Partner Identity Exploration		
ID Exploration 1	0.77	0.78
ID Exploration 2	0.70	0.70
ID Exploration 3	0.84	0.83
ID Exploration 4	0.27	-----
ID Exploration 5	0.34	-----

Fit (All):  $\chi^2=683.11$  (df=98,  $p<.001$ ), CMIN/DF = 6.97, TLI = 0.84, CFI = 0.88,

RMSEA=0.082 ( $p<0.001$ )

Fit (M1):  $\chi^2=255.17$  (df=59,  $p<.001$ ), CMIN/DF = 4.33, TLI = 0.93, CFI = 0.96,

RMSEA=0.061 ( $p=.007$ )

partner identity exploration based on confirmatory factor analysis. Only these three dating partner identity exploration items were used in the models tested (see Table 3).

For relationship anxiety and relationship avoidance, which were each measured by nine variables, the number of indicators for each factor was reduced by parceling the data (see Appendices B and C for EFA results; see Table 3 for loadings of the parcels in the CFA). Composites were formed by summing and averaging the variables used for each indicator. For relationship anxiety, based on exploratory factor analyses and inter-item correlations, the first anxiety indicator consisted of three relationship anxiety items, the second anxiety indicator consisted of four relationship anxiety items, and the third anxiety indicator consisted of two anxiety items. Relationship avoidance was measured by two indicators. The first avoidance indicator consisted of five relationship avoidance items, and the second avoidance indicator consisted of two relationship avoidance items. As indicated by the results of the CFA, the remaining two items in the avoidance subscale did not load adequately onto relationship avoidance as a third indicator; this indicator was dropped. For measurement model (M1) fit statistics using the full sample, see Table 4.

#### *Hypothesized Structural Equation Model*

Structural equation modeling was used to test the hypothesized model. Several models were fit to the data in order to understand the associations between parental warmth and support, comfort with intimacy (romantic relationship anxiety and avoidance), and exploration of the dating partner identity. First, a model was fit that examined the paths between parental warmth and support, relationship anxiety, relationship avoidance, and dating partner identity exploration (M2). Using the full sample (N=882), parental warmth/support did not significantly predict relationship

Table 4.

*Comparison of Models: Goodness of Fit Statistics for Full Sample (N=882)*

Model	Chi-Square	GMIN/DF	TLI	CFI	RMSEA
M2	255.17 (df=59, $p < .001$ )	4.33	0.93	0.96	0.061 ( $p = .007$ )
(M2 = Hypothesized Model – Predictors Only)					
M3	624.29 (df=119, $p < .001$ )	5.25	0.85	0.89	0.069 ( $p < .001$ )
(M3 = Full Hypothesized Model)					
M4	320.45 (df=84, $p < .001$ )	3.82	0.92	0.95	0.057 ( $p = .049$ )
(M4 = Trimmed Model)					
M5	135.84 (df=52, $p < .001$ )	2.61	0.97	0.98	0.043 ( $p = .908$ )
(M5 = Trimmed Model without Anxiety – Constrained Path)					
M6	322.98 (df=85, $p < .001$ )	3.80	0.92	0.95	0.056 ( $p = .052$ )
(M6 = Trimmed Model with Anxiety – Constrained Path)					

avoidance, but it was a significant negative predictor of relationship anxiety and a significant positive predictor of dating partner identity exploration (see Appendix D). As expected, greater parental warmth/support was associated directly with less relationship anxiety and more dating partner identity exploration. Although not predicted by parental warmth/support, relationship avoidance was a strong negative predictor of dating partner identity exploration. The fit of this model was adequate (see Table 4).

Next, the hypothesized structural model (M3), which included all control variables (i.e., gender, age, dating experience, and parental marital status) as predictors of each endogenous latent factor in the model (i.e., relationship anxiety, relationship avoidance, and identity exploration), was examined (see Appendix E). The only control variables which were significantly associated with any of the latent factors were gender and parental marital status (see Table 5). Specifically, being female was related to more dating partner identity exploration, and living with first married parents was related to less dating partner identity exploration than living with a single parent. The dummy variable for remarried parent versus other was nonsignificant, indicating that the only difference by parental marital status was between first married parent and single parent.

While in the model as a control variable, gender was found to be significantly and positively associated with dating partner identity exploration, indicating that females, on average, had higher levels of dating partner identity exploration than males. Because gender was hypothesized to moderate associations among factors in the model, it was removed as a control variable from the model in order to be able to consistently use the same model in fitting data across groups when testing for moderation. In addition,

Table 5.

*Path Coefficients for Full Hypothesized Structural Model (N = 882)*

Predictor	Outcome	Regression Weight	Standardized Regression Weight
Parental Warmth	Anxiety	-0.17***	-0.16
Parental Warmth	Avoidance	-0.06	-0.07
Parental Warmth	ID Exploration	0.23***	0.23
Anxiety	ID Exploration	0.37***	0.41
Avoidance	ID Exploration	-0.68***	-0.56
Number of Partners	Anxiety	0.01	0.05
Number of Partners	Avoidance	-0.004	-0.02
Number of Partners	ID Exploration	-0.01	-0.05
Age	Anxiety	-0.03	-0.05
Age	Avoidance	-0.01	-0.03
Age	ID Exploration	0.02	0.04
Gender	Anxiety	0.10	0.05
Gender	Avoidance	-0.02	-0.01
Gender	ID Exploration	0.24**	0.13
First Married vs. Other	Anxiety	0.02	0.01
First Married vs. Other	Avoidance	-0.04	-0.03
First Married vs. Other	ID Exploration	-0.14*	-0.09
Remarried vs. Other	Anxiety	0.08	0.05
Remarried vs. Other	Avoidance	-0.05	-0.04
Remarried vs. Other	ID Exploration	-0.11	-0.07

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



because of the significant association between parental marital status and dating partner identity exploration indicating that mean levels of dating partner identity exploration were lower on average for adolescents from first married parent families than for adolescents from single parent families, it was decided that the effects of parental marital status on the latent factors in the model should be examined in greater detail. Based on the lack of direction from the literature regarding the role of family structure, it was decided to further explore the role of family structure by testing it as a moderator rather than simply controlling its effects.

Because the inclusion of the full set of control variables resulted in an inadequate fit of the model to the data, a more parsimonious model that included a selected subset of the control variables was used for subsequent testing of the hypothesized mediate and moderated associations among the key variables. Specifically, gender and family structure were removed as control variables, leaving age and dating experience (number of partners) as the retained control variables in the model.

#### *Trimmed Model and Mediation*

*Trimmed model.* Path coefficients for latent factors (i.e., parental warmth/support, anxiety, avoidance, and identity exploration) in M4 (see Appendix F) were similar but not identical to path coefficients in M3, model fit statistics for the trimmed model (M4) were in the acceptable range (see Table 4 for model fit statistics). Although the Chi-square test of model fit was significant, the Chi-square statistic is influenced by sample size. Thus, other fit statistics were examined, and they indicated adequate fit of the model to the data. Finally, all paths in the model were significant and supported their hypothesized relations, with two exceptions. First, the path between anxiety and identity

exploration was positive instead of negative as hypothesized. Thus, more anxiety about dating relationships is associated with more dating partner identity exploration. Second, the path between parental warmth/support and avoidance was not significant. Overall, this model predicted 22.4% of the variance in dating partner identity exploration.

*Mediation.* In order to test whether there are indirect or mediated relations in the model, procedures outlined in Holmbeck (1997) were used. According to Holmbeck, several steps needed to be taken. First, direct effects from the potentially mediated variables to the outcome variable needed to be established. In the current model, this meant establishing a direct link between the outcome of dating partner identity exploration and the predictor variable of parental warmth/support, which was statistically confirmed (see Appendix F). Next, verification that the mediator shows a significant association with the outcome variable needs to be established. This was confirmed in the current model for relationship anxiety and relationship avoidance (see Appendix F). The mediated variable also needed to show a significant association with the mediator. This was confirmed only for relationship anxiety, indicating that relationship avoidance could not serve as a mediator of the relationship between parental warmth/support and dating partner identity exploration (see Appendix F). A model was tested (M5) which included the predictors and control variables in the trimmed model excluding the hypothesized mediator – anxiety (see Appendix G for the model; see Table 4 for model fit statistics). Because the path between parental warmth/support and avoidance was not significant ( $p=0.11$ ) in M4 and therefore could not be considered a mediator of the relationship between parental warmth/support and dating partner identity exploration, the path between parental warmth/support and avoidance was constrained to zero. Thus, only

anxiety was tested as a mediator of the relationship between parental warmth/support and dating partner identity exploration. In M5, the path between parental warmth/support and dating partner identity exploration was significant and positive, with the standardized regression weight of 0.19 (see Appendix G).

A model also was then tested with anxiety added back into the model, along with all other predictors and control variables (M6) (see Appendix H), to determine whether adding the proposed mediator back into the model would reduce the strength of the path between the mediated variable and the outcome variable. As in M5, the path from parental warmth/support and avoidance was constrained to zero (see Table 4 for model fit statistics). In M6, the relationship between parental warmth/support and dating partner identity exploration was significant. The standardized regression weight for this path of 0.25 was not reduced by adding anxiety back into this model (see Appendices G and H). That is, the relationship between parental warmth/support and dating partner identity exploration did not decrease or become nonsignificant when anxiety was added to the model (compare M5 with M6). These results indicate that anxiety did not mediate the relationship between parental warmth and support and dating partner identity exploration, and that parental warmth and support had a significant and direct effect on dating partner identity exploration.

Finally, in the assessment of the mediated associations, the path from the mediated variable to the outcome variable must be constrained to zero. That is, constraining the path to zero allows testing of a model requiring full mediation, which is supported when the fit remains good with the direct path from the mediated variable to the outcome constrained to zero. If there are mediated associations, then the addition of

the unconstrained path from the mediated variable to the outcome variable should not improve model fit. This step was not completed because adding anxiety back into the model did not result in reduced strength of the path between parental warmth/support and dating partner identity exploration, indicating that anxiety was not a mediator of this relationship. However, because the data are cross-sectional rather than longitudinal, results of the tests for mediation will be interpreted cautiously, as one variable cannot truly be said to precede another in this dataset.

#### *Moderation by Gender and Parental Marital Status*

*Moderation by gender.* In order to test the hypothesis that associations in the model may be moderated by gender, a series of analyses was performed. It was hypothesized that associations between parental warmth/support, avoidance, anxiety, and dating partner identity exploration would be stronger for females than for males. Prior to testing this hypothesis, the measurement models were examined and compared for females (M7) and males (M8) (see Table 6 for model fit statistics). Factor loadings for males and females generally fell within 0.10 of each other (see Table 7 for standardized factor loadings in the female and male samples in the current study). The multigroup analysis procedures revealed that the measurement models did not differ for females and for males ( $p = 0.251$  for measurement weights).

After examining the measurement models, the structural models for males and females were fit separately. The model for males explained 37.6% of the variance in dating partner identity exploration, and the model for females explained 17.0% of the variance in dating partner identity exploration. Multigroup analyses were then performed

Table 6.

*Comparison of Models: Goodness of Fit Statistics by Gender*

Model	Chi-Square	CMIN/DF	TLI	CFI	RMSEA
M9	280.08 (df=84, $p < .001$ )	3.33	0.92	0.94	0.057 ( $p = .057$ )
(M9 = Trimmed Model Females, N=719)					
M10	140.58 (df=84, $p < .001$ )	1.67	0.91	0.93	0.066 ( $p = .084$ )
(M10 = Trimmed Model Males, N=154)					
Unconstrained	421.01 (df=168, $p < .001$ )	2.51	0.92	0.94	0.042 ( $p = 0.998$ )
Constrained	524.14 (df=200, $p < .001$ )	2.62	0.91	0.93	0.043 ( $p = 0.994$ )
$\Delta\chi^2 = 103.13$ $\Delta df = 32$ Crit $\chi^2 = 42.59$ ( $\alpha = .05$ , $df = 32$ )					

Table 7.

*Standardized Confirmatory Factor Analysis Loadings for Measurement Model by Gender*

Variable	Factor Loading	Factor Loading
	Females (N= 719)	Males (N = 154)
<b>Parental Warmth</b>		
Parental Warmth 1	0.78	0.79
Parental Warmth 2	0.87	0.83
Parental Warmth 3	0.71	0.65
Parental Warmth 4	0.80	0.86
Parental Warmth 5	0.80	0.80
<b>Anxiety</b>		
Anxiety 1	0.72	0.75
Anxiety 2	0.70	0.76
Anxiety 3	0.54	0.70
<b>Avoidance</b>		
Avoidance 1	0.68	0.74
Avoidance 2	0.73	0.65
<b>Dating Partner Identity Exploration</b>		
ID Exploration 1	0.77	0.87
ID Exploration 2	0.70	0.69
ID Exploration 3	0.79	0.91

Fit M7 (Measurement Model Females):  $\chi^2 = 219.28$  (df=59,  $p < .001$ ), CMIN/DF = 3.72, TLI = 0.93,

CFI = 0.95, RMSEA = 0.062 ( $p = .014$ )

Fit M8 (Measurement Model Males):  $\chi^2 = 116.88$  (df=59,  $p < .001$ ), CMIN/DF = 1.98, TLI = 0.90,

CFI = 0.93, RMSEA=0.061 ( $p = .007$ )

to see whether the paths in the structural model differed significantly in strength according to gender (see Table 6 for model fit statistics; see Appendices I and J for the structural models for females (M9) and for males (M10)). Paths in the model were constrained to be equal for males and females. According to nested model comparisons, assuming the unconstrained model to be correct, structural weights were significant ( $p < .001$ ), indicating that at least some of the path coefficients in the model for females and in the model for males were significantly different. Results of the delta chi-square test also revealed that the unconstrained model and the constrained model for females and males were significantly different, confirming that the constrained model and unconstrained model for females and males were significantly different. In addition, CMIN/DF, CFI, TLI, and RMSEA fit statistics for the constrained model indicated slightly worse fit than did fit statistics for the unconstrained model, although these fit statistics fell within the acceptable range for both models (see Table 6).

After determining whether the fit of the model was reduced by constraining models for females and males to be equal, paths were compared to identify which paths differed for males and females. Based on these comparisons, the paths between parental warmth/support and anxiety ( $p < .01$ ) and the paths between parental warmth/support and identity exploration ( $p < .05$ ) were significantly different for males and for females. By examining the model for females (M9) and the model for males (M10) (see Table 6 for model fit statistics), it was determined that the standardized coefficient for the path between parental warmth/support and anxiety was -0.22 and significant for females and was 0.01 and nonsignificant for males (see Appendices I and J). These results support the expectation that the path would be stronger for females than males and indicate that

parental warmth/support has a negative association with anxiety but only for females. That is, higher levels of parental warmth/support were associated with lower levels of anxiety in the romantic relationship for females but not for males.

Another difference found for males and females was for the path from parental warmth/support to dating partner identity exploration. This path was significant and positive for both males and females, but was significantly larger for males (see Appendices I and J). The gender difference found for this path is counter to the hypothesis that the relationships among variables in the model would be stronger for females than for males.

*Moderation by parental marital status.* In order to explore whether the associations among variables in the model were moderated by parental marital status, a series of analyses was performed similar to those performed for testing moderation by gender. Because of the exploratory nature of these analyses, no particular hypotheses were tested. However, it was anticipated that differences might be found when comparing married (first married) and single parent families given that parental marital status was found to be a significant predictor of exploration of the dating partner identity.

First, the measurement model was fit separately for adolescents with single parent (M11), first married parent (M12), and remarried parent (M13) family structures. Model fit statistics for each of these models were in the acceptable range (see Table 8 for model fit statistics; see Table 9 for standardized factor loadings by parental marital status). All standardized factor loadings for each latent factor among adolescents with first married parents, single parents, and remarried parents were above 0.55 (see Table 9).



Table 8.

*Comparison of Models: Goodness of Fit Statistics by Parental Marital Status*

Model	Chi-Square	CMIN/DF	TLI	CFI	RMSEA
M14	158.64 (df=84, $p < .001$ )	1.89	0.91	0.94	0.058 ( $p = .156$ )
(M14 = Trimmed Model Single Parent, N=262)					
M15	146.39 (df=84, $p < .001$ )	1.74	0.94	0.96	0.052 ( $p = .413$ )
(M15 = Trimmed Model First Married Parent, N=281)					
M16	175.75 (df=84, $p < .001$ )	2.09	0.88	0.92	0.070 ( $p = .014$ )
(M16 = Trimmed Model Remarried Parent, N=226)					
Unconstrained	480.80 (df=252, $p < .001$ )	1.91	0.91	0.94	0.034 ( $p = 1.00$ )
Constrained	567.71 (df=316, $p < .001$ )	1.80	0.92	0.93	0.032 ( $p = 1.00$ )
$\Delta\chi^2 = 87.71$		$\Delta df = 64$	Crit $\chi^2 = 78.86$ ( $\alpha = .05$ , $df = 64$ )		

Table 9.

*Standardized Confirmatory Factor Analysis Loadings for Measurement Model by Parental Marital Status*

Variable	Factor Loading	Factor Loading	Factor Loading
	Single Parent (N = 262)	First Married Parent (N = 281)	Remarried Parent (N = 226)
<b>Parental Warmth</b>			
Parental Warmth 1	0.76	0.80	0.77
Parental Warmth 2	0.88	0.85	0.84
Parental Warmth 3	0.67	0.73	0.65
Parental Warmth 4	0.77	0.82	0.77
Parental Warmth 5	0.75	0.80	0.82
<b>Anxiety</b>			
Anxiety 1	0.76	0.65	0.71
Anxiety 2	0.75	0.65	0.68
Anxiety 3	0.60	0.57	0.56
<b>Avoidance</b>			
Avoidance 1	0.65	0.76	0.64
Avoidance 2	0.79	0.66	0.77
<b>Dating Partner Identity Exploration</b>			
ID Exploration 1	0.76	0.84	0.76
ID Exploration 2	0.67	0.67	0.71
ID Exploration 3	0.80	0.78	0.87

Fit M11 (Measurement Model Single Parent):  $\chi^2 = 128.76$  (df=59,  $p < .001$ ), CMIN/DF = 2.18, TLI = 0.91, CFI = 0.94, RMSEA = 0.067 ( $p = .037$ )

Fit M12 (Measurement Model First Married Parent):  $\chi^2 = 118.94$  (df=59,  $p < .001$ ), CMIN/DF = 2.02, TLI = 0.93, CFI = 0.96, RMSEA=0.060 ( $p = .136$ )

Fit M13 (Measurement Model Remarried Parent):  $\chi^2 = 123.79$  (df=59,  $p < .001$ ), CMIN/DF = 2.10, TLI = 0.91, CFI = 0.94, RMSEA=0.070 ( $p = .031$ )

However, using the multigroup analysis procedure, it was determined that the measurement models did not differ by family structure ( $p=0.093$  for measurement weights).

After examining the measurement models, structural models were fit separately for each parental marital status group. Results indicated that the model fitted for single parents predicted 17.7% of the variance in dating partner identity exploration, the model fitted for first married parents predicted 36.5% of the variance in dating partner identity exploration, and the model fitted for remarried parents predicted 24.8% of the variance in dating partner identity exploration. Fit statistics for each of these models (M14, M15, and M16) indicated adequate fit to the data (see Table 8 for model fit statistics).

Next, multigroup analyses were performed to determine whether there were significant differences in the structural models for the single parents (M14; see Appendix K), first married parents (M15; see Appendix L), and remarried parents (M16; see Appendix M). Based on nested model comparisons, assuming the unconstrained model to be correct, structural weights were significant ( $p=.03$ ), the constrained model and the unconstrained model for first married parents, single parents, and remarried parents were significantly different. Results of the delta chi-square test also revealed that the unconstrained model and the constrained model differed significantly. However, other fit statistics for the constrained model did not show worse fit for the constrained model than for the unconstrained model fit than did fit statistics for the unconstrained model, although these fit statistics fell within the acceptable range for both models (see Table 8).

Although the structural weights for the multigroup analysis ( $p = .03$ ) indicated that the structural models differed by parental marital status (see M14-16), when

compared, the paths among latent factors in the three models were not found to differ significantly (see Appendices K, L, and M). Despite the lack of significant difference, some interesting patterns in the models were noted. Specifically, the path between avoidance and dating partner identity exploration was significant and negative for adolescents in both single parent and first married parent families, although the structural weight for this path was marginally significant ( $p=0.096$ ). That is, this difference in strength of the path, with the path showing a stronger trend for adolescents in first married parent families, is worth noting and falls within the 90% confidence interval. Furthermore, the path between parental warmth/support and anxiety was only significant (and negative) in the sample of adolescents living with a single parent, and the path between parental warmth/support and avoidance was significant (and negative) only in the sample of adolescents living with first married parents. Age significantly (and positively) predicted dating partner identity exploration only among the single parent family structure group. Thus, although the models overall were significantly different at the  $p < .05$  level and interesting differences in path significance among models were noted, parental marital status was not supported as a moderator of the relationships among latent factors based on these multigroup analyses.

#### *Alternate Model*

Data in this study were collected concurrently, therefore, conclusions cannot be drawn about which factors preceded others. An alternate model was tested with anxiety and avoidance as the exogenous variables predicting parental warmth/support, and all three of these factors predicting identity exploration (see Appendix N). In addition, all control variables (i.e., gender, age, dating experience, and parental marital status) were

included as predictors of both endogenous latent factors (i.e., parental warmth/support and identity exploration). The alternate model predicted 24.7% of the variance in dating partner identity exploration. The Chi-square test of model fit was significant, however, and other fit statistics indicated that the model did not fit the data well. Overall, the fit of this model was similar to the fit of the hypothesized model (M3), which also was not an adequate fit to the data (see Table 10 for model fit statistics).

Structural paths in the hypothesized model (M3) remained consistent in the alternate model (M17) (for path coefficients see Table 11). However, in the alternate model, parental marital status was a significant predictor of parental warmth/support, indicating that on average there are higher levels of parental warmth and support for adolescents living in first married parent family structures than adolescents living in single parent family structures. Thus, although the alternate model could not provide information about whether relationship anxiety and relationship avoidance precede parental warmth and support because the data are not longitudinal, this alternate model demonstrated that the variable of parental marital status has a significant influence in the model, both on parental warmth/support and on exploration of the dating partner identity.

Table 10.

*Comparison of Alternate Models: Goodness of Fit Statistics for Full Sample (N=882)*

Model	Chi-Square	CMIN/DF	TLI	CFI	RMSEA
M3	624.29 (df=119, $p < .001$ )	5.25	0.85	0.89	0.069 ( $p < .001$ )
(M3= Full Hypothesized Model)					
M4	320.45 (df=84, $p < .001$ )	3.82	0.92	0.95	0.057 ( $p = .049$ )
(M4 = Trimmed Model)					
M17	611.09 (df=124, $p < .001$ )	4.92	0.86	0.90	0.067 ( $p = .049$ )
(M17 = Alternate Model)					

Table 11.

*Path Coefficients for Alternate Model (N = 882)*

Predictor	Outcome	Regression Weight	Standardized Regression Weight
Anxiety	Parental Warmth	-0.19**	-0.20
Anxiety	ID Exploration	0.36***	0.41
Avoidance	Parental Warmth	0.08	0.06
Avoidance	ID Exploration	0.68***	0.55
Parental Warmth	ID Exploration	0.22***	0.34
Number of Partners	Parental Warmth	-0.008	-0.04
Number of Partners	ID Exploration	-0.006	-0.03
Age	Parental Warmth	-0.03	-0.05
Age	ID Exploration	0.02	0.04
Gender	Parental Warmth	0.07	0.04
Gender	ID Exploration	0.26***	0.14
First Married vs. Other	Parental Warmth	0.21***	0.13
First Married vs. Other	ID Exploration	-0.13*	-0.09
Remarried vs. Other	Parental Warmth	-0.09	-0.05
Remarried vs. Other	ID Exploration	-0.07	-0.04

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

*Note:* Anxiety and Avoidance were allowed to correlated in the model ( $r = .66$ ).

## DISCUSSION

### *Overview*

The goal of the current study was to examine how parental warmth and support and comfort with intimacy, as indicated by romantic relationship anxiety and avoidance, were associated with exploration of the dating partner identity among adolescents aged 14-18. Overall, parental warmth and support and comfort with intimacy significantly predicted exploration of the dating partner identity. Romantic relationship anxiety, however, did not operate as a mediator of the association between parental warmth and support and dating partner identity exploration. Some important differences in associations among the variables were found between males and females. For example, the negative association between parental warmth and support and romantic attachment anxiety was significant for females but not for males, and the positive association between parental warmth and support and dating partner identity exploration was significantly stronger for males than for females. Associations among the variables did not differ significantly among adolescents from different family structures. Finally, the alternate model that tested parental warmth as the mediator of the association of both anxiety and avoidance with dating partner identity exploration did not show a better fit to the data than the hypothesized model did.

*Hypothesized and trimmed models.* In the hypothesized model, parental warmth and support significantly and negatively predicted romantic relationship anxiety, and



parental warmth and support also significantly and positively predicted dating partner identity exploration, as hypothesized. These relationships were statistically significant after controlling for dating experience (i.e., number of partners), age, gender, and parental marital status. These associations are consistent with current research literature indicating that parenting behaviors of warmth and support may be linked with adolescents' comfort with intimacy within romantic relationships (e.g., Dekovic & Meeus, 1997; Seiffge-Krenke et al., 2001), and with higher levels of identity exploration (e.g., Grotevant & Cooper, 1985). Interpersonal skills or attitudes toward intimacy learned in the parent-adolescent relationship may carry over into the romantic relationship (e.g., Conger et al., 2000). Or, it may be that self-perceptions, experiences, and expectations of parents linked with warmth and support within the parent-adolescent relationship may help the adolescent to develop greater comfort with intimacy, or to have lower levels of anxiety, within romantic relationships (e.g., Connolly & Johnson, 1996; Dekovic & Meeus, 1997). Parental warmth and support also may allow the adolescent to engage in greater dating partner identity exploration by providing a secure base for exploration, or a context in which it is safe for the adolescent to process and explore who he or she is as a dating partner within his or her romantic relationships (e.g., Grotevant & Cooper, 1985; Luyckx et al., 2006).

Contrary to what was hypothesized, parental warmth and support did not significantly predict romantic relationship avoidance among adolescents in this sample. That is, it was believed that higher levels of parental warmth and support would be significantly linked with lower levels of romantic relationship avoidance, but in the current study this association was not significant. Therefore, it can be assumed that

variance in romantic relationship avoidance is explained by factors other than parental warmth and support, adolescent age, adolescent dating experience, adolescent gender, or parental marital status, as none of these variables significantly predicted romantic relationship avoidance in the current sample. It may be that parental warmth and support is significantly associated with romantic relationship anxiety and not with romantic relationship avoidance because adolescents who experience romantic attachment anxiety may be more likely to seek out or use parental warmth and support as a resource to reduce this anxiety, whereas adolescents who are avoidant in their romantic relationships may not be likely to seek out parental warmth and support as a salient resource. Such a conclusion could be supported by the findings in the study conducted by Furman et al. (2000), which found that support (i.e., communication, seeking support, and providing support) in the parent-adolescent relationship was associated with support in the adolescent romantic relationship. That is, warmth and support in the parent-adolescent relationship may only be a relevant influence or resource for adolescents who seek out support in their romantic relationships, but not for adolescents who exhibit higher levels of romantic relationship avoidance, and thus are likely to experience greater fear of closeness and discomfort with intimacy (Hazan & Shaver, 1987) and not seek out support from their romantic partners.

Finally, although it was hypothesized that anxiety and avoidance would both negatively predict dating partner identity exploration (i.e., greater comfort with intimacy would be associated with higher levels of dating partner identity exploration), only avoidance negatively predicted dating partner identity exploration. Counter to what was expected, anxiety positively predicted dating partner identity exploration. Thus, the

negative relationship between avoidance and dating partner identity exploration was consistent with current literature indicating that lower levels of avoidance would likely be linked with higher levels of dating partner identity exploration (Berman et al., 2006; Hoegh & Bourgeois, 2002). Furthermore, the negative association between romantic relationship avoidance and dating partner identity exploration supports the theoretical concept that intimacy or comfort with intimacy in the romantic relationship allows the individual to be able to explore who he or she is as a dating partner within that relationship (e.g., Montgomery, 2005; Seginer & Noyman, 2005).

Although the positive relationship between anxiety and dating partner identity exploration does not appear to be consistent with literature linking lower levels of romantic attachment avoidance and anxiety and with higher levels of identity exploration (e.g., Berman et al., 2006, Hoegh & Bourgeois, 2002; Seginer & Noyman, 2005), and does not support the hypotheses in this study, it must be noted that at least one previous study did find that adult attachment anxiety was linked with higher levels of identity exploration (e.g., Kennedy, 1999). It is conceivable that anxiety or preoccupation in romantic relationship attachment is linked with greater dating partner identity exploration, as an individual who has higher levels of romantic relationship anxiety may be more concerned or preoccupied overall with the romantic relationship and thus with the dating partner identity, as well. That is, as anxious romantic attachment has been associated with behaviors and attitudes such as jealousy and emotional extremes (Hazan & Shaver, 1987), anxious romantic attachment may also be linked with a sort of preoccupation with the relationship and with exploring who one is as a dating partner within that relationship. Such a hypothesis could be tested in future research in order to

determine whether some degree of romantic relationship anxiety may actually help promote effective dating partner identity exploration among adolescents, whereas very high or very low levels of romantic relationship anxiety may predict less effective exploration of the dating partner identity. Researchers studying links between avoidance, anxiety, and identity exploration also have indicated that caution is necessary in interpreting contradictions among studies in associations that have been found, due to differences in measures used to assess both avoidance, anxiety, and identity exploration (Berman et al., 2006). Thus, it may be that a more precise measure of romantic relationship anxiety or of dating partner identity exploration may further elucidate the nature of the association between relationship anxiety and dating partner identity exploration.

It should be noted that, in the hypothesized model, the only control variables which were significantly associated with any of the latent factors in the model were gender (i.e., being female) and parental marital status (i.e., living in a single parent family structure), which were both associated with higher levels of dating partner identity exploration. Because it was expected that gender might have an important effect on the associations among variables in the model according to the previous literature (e.g., Archer, 1992; Montgomery, 2005; Patterson et al., 1992; Shulman & Scharf, 2000), the positive and significant direct effect of gender on dating partner identity exploration indicating that average levels of dating partner identity exploration were significantly higher for females than for males was not surprising. However, due to ambiguity in existing literature as to the specific effects of family structure on identity exploration, the finding that average levels of dating partner identity exploration were higher for

adolescents in single parent families than for adolescents in first married parent families was intriguing. Possibly, because parental romantic relationships may serve as an important model for adolescent and young adult romantic relationships (Conger et al., 2000), adolescents in single parent families may be more motivated to explore the dating partner identity because of a lack of a stable model for the parental romantic relationship. Although age and dating experience were not significantly associated with any of the latent factors, it may be that these factors would have had a significant association with one or more latent factors if the sample had included a broader range of adolescents in terms of age and dating experience.

Collectively, parental warmth and support, romantic relationship anxiety, and romantic relationship avoidance along with control variables of age and dating experience explained 22.4% of the variance in exploration of the dating partner identity in the trimmed model. Although the hypothesized model explained 25.0% of the variance in exploration of the dating partner identity (because of the additional contributions of gender and parental marital status), the trimmed model was a better fit to the data and still explained almost a quarter of the variance in the outcome variable of dating partner identity exploration.

Overall, results of this study partially support the first hypothesis that comfort with intimacy, as indicated by low levels of both relationship anxiety and relationship avoidance in the romantic relationship attachment, would positively predict exploration of the dating partner identity. That is, lower avoidance and higher anxiety were associated with greater dating partner identity exploration. However, it may be that the type of exploration may differ for those with moderate versus high anxiety, in that dating

partner identity exploration may be more healthy for those with moderate romantic relationship anxiety. In addition, parental warmth and support was expected to positively predict both comfort with intimacy (i.e., lower levels of both anxiety and avoidance in the romantic relationship) and dating partner identity exploration. Again, this hypothesis was generally supported. Parental warmth and support predicted both relationship anxiety and dating partner identity exploration, but not relationship avoidance. In general, these findings are consistent with the literature and add to the literature by addressing adolescent romantic relationships as a meaningful context in which adolescents synthesize their identities, particularly within the interpersonal identity domain.

*Mediation.* According to the analyses conducted, romantic relationship anxiety did not mediate the relationship between parental warmth/support and exploration of the dating partner identity. Although it was hypothesized that anxiety would serve as a mediator of this relationship, it appears that parental warmth and support has significant direct effects on both romantic relationship anxiety and on dating partner identity exploration. Hence, the second hypothesis of this study was not supported. These results are consistent with those of Dekovic and Meeus (1997), who found that warm and supportive parenting had a unique influence on the adolescent's involvement with peers which was not accounted for by the adolescent's self-concept. The results in the current study indicate that parental warmth and support plays an important part in being directly associated with both comfort with intimacy and exploration of the dating partner identity within adolescent romantic relationships.

*Moderation by gender.* Overall, the third hypothesis of this study, that gender would moderate the relationships among parental warmth and support, romantic

relationship anxiety, romantic relationship avoidance, and dating partner identity exploration was partially supported. The multigroup analysis indicated that there were significant differences among paths in the model according to gender. In particular, the relationship between parental warmth and support and romantic relationship anxiety was negative and significant for females but not significant for males. This result supports research in previous literature indicating that such associations may be stronger for adolescent females because females are socialized to be more concerned with romantic relationships and intimacy than boys are (e.g., Archer, 1992; Montgomery, 2005; Patterson et al., 1992; Shulman & Scharf, 2000). However, the significant and positive association between parental warmth and support and dating partner identity exploration was significantly stronger for males than for females. Furthermore, the model explained 37.6% of the variance in dating partner identity exploration for males, but only explained 17.0% of the variance in dating partner identity exploration for females, which is consistent with the hypothesis that associations among variables in the model would operate differently for female and male adolescents.

It is possible that males may be more prone to only talk with parents or seek the support of parents when considering dating partner identity, whereas females may be more likely to also talk with and seek support from friends when engaging in exploration of the dating partner identity. Such explanations would be supported by research indicating that females tend to experience higher levels of affective intensity and support in their romantic relationships during adolescence, and that outcomes such as affective intensity with a romantic partner are linked with quality of peer relationships (Shulman & Scharf, 2000). Nonetheless, because of the relatively small sample size of males, and

because of the characteristics of the sample (i.e., the sample was drawn from elective Family and Consumer Sciences classes), it is important that such moderation of the relationships in this model by gender be tested again using a larger, more broadly representative, gender balanced adolescent sample in order to determine whether this interaction effect is replicated.

*Moderation by parental marital status.* Results of the multigroup analysis indicated that although the models were significantly different overall, there were no significant differences in the path coefficients among parental warmth/support, anxiety, avoidance, and identity exploration when compared according to parental marital status. Thus, parental marital status was not found to be a moderator of the relationships among the factors in the current sample. Because this analysis was exploratory, no particular hypotheses were offered regarding moderation by parental marital status. Based on limited literature regarding this topic, however, it was believed that having biological or adoptive parents married to each other might lead to stronger associations among variables in the model (e.g., Conger et al., 2000; Seiffge-Krenke et al., 2001). Therefore, although parental marital status did not moderate the associations in the statistical model, parental marital status may have important implications for parental warmth and support, adolescent comfort with intimacy, and adolescent dating partner identity exploration, as suggested by differences in significance of certain paths among the models. Findings indicated that the negative relationship between parental warmth/support and anxiety was only significant for adolescents in single parent families, whereas the path between parental warmth/support and avoidance was only significant for adolescents in first married parent families. In addition, the model explained 37.6% of the variance in dating



partner identity exploration for adolescents with first married parents, but only explained 17.7% of the variance in dating partner identity exploration for adolescents with single parents and 24.8% of the variance in dating partner identity exploration for adolescents with remarried parents. Such differences are consistent with other findings indicating that parental marital status does have some effect on dating partner identity exploration. Therefore, parental marital status may be linked in some way to relationship avoidance, relationship anxiety, and dating partner identity exploration.

Parental marital status likely serves as a proxy for other processes or factors within the family, such as attitudes about romantic relationships or even availability of economic and social support, that may affect associations among parental warmth/support, comfort with intimacy, and exploration of the dating partner identity. Furthermore, it is possible that qualities of the parental marital relationship, such as those studied by Conger et al. (2000) including marital warmth and support or marital hostility and coercion, may be more clearly linked than parental marital status with adolescent outcomes of comfort with intimacy or dating partner identity exploration. These results do suggest that future research should examine in more detail the effects of parental marital status and variables linked with family structure (such as the quality of parental romantic relationships or the quality of social support provided to the parent) on adolescent romantic relationships and dating partner identity exploration.

*Alternate model.* An alternate model was tested with both parental warmth and dating partner identity exploration as endogenous variables predicted by relationship anxiety and relationship avoidance, while controlling for dating experience, age, gender, and parental marital status. Path coefficients for associations among latent factors were

similar to those in the hypothesized model, and model fit statistics for both the hypothesized model and the alternate model did not indicate adequate model fit to the data. Although the alternate model did not appear to yield any new information about links among the latent factors in the current study, this model does demonstrate that parental marital status has a significant influence on parental warmth and support. Thus, because the results showed that there were higher levels of parental warmth and support in first married parent family structures than in single parent family structures, parental marital status not only directly affects exploration of the dating partner identity, but also has an important influence parental warmth and support which in turn affects dating partner identity exploration. It may be that parents who are married have more support within their own romantic relationship, and thus are able to provide more support and warmth for the adolescent, which supports that adolescent's identity exploration. Or, it may be that single parents may have less time and fewer resources available to enable them to engage in more warm and supportive interactions with their adolescents. That is, environmental or relational factors affecting the adolescents' parents may have an indirect effect on dating partner identity exploration in adolescence through their influence on parental warmth and support (e.g., Conger et al., 200; Seiffge-Krenke et al., 2001). The alternate model demonstrates that such factors should be taken into account in future research addressing influences on adolescent romantic relationships and dating partner identity exploration.

### *Limitations*

One major limitation of this study was that the data were cross-sectional. Thus, conclusions about mediation and moderation must be drawn with caution, since data

collected cannot yield information about whether certain variables actually precede or cause differences or changes in other variables. That is, conclusions about associations and processes over time cannot be drawn from the results of this study. However, the results of this study do suggest that longitudinal examination of the associations among parental warmth and support, romantic attachment avoidance and anxiety, and dating partner identity exploration would be of potential value. In particular, future research using longitudinal data may yield more information as to whether greater parental warmth and support helps reduce subsequent levels of adolescent romantic relationship anxiety, or whether romantic relationship anxiety results in adolescents seeking out or receiving greater amounts of parental warmth and support.

Another limitation of this study is that adolescents included in this study were enrolled in Family and Consumer Sciences classes, an elective which is generally known for addressing relationships, families, and home economics skills. Hence, students enrolled in these classes may have been actively seeking more information about marriage and dating relationships, and thus may have been more likely to engage in dating partner identity exploration than other adolescents do. In addition, males in these classes may not have been representative of the general population of high school adolescent males. Furthermore, enrollment in these classes was not equally divided by gender, as over 80% of the adolescents studied were female. It will be important for future research to include larger samples of male students and to draw a sample from the general population of high school students (i.e., from required rather than elective classes).

This study used a secondary dataset and therefore was limited in the variables that were available to test the model. For example, use of a more precise or comprehensive measure of dating partner identity exploration would have been preferable in order to more adequately assess the extent of exploration of the dating partner identity occurring in adolescent romantic relationships (see Appendix A). In addition, parental warmth/support was addressed more generally in the current study (see Appendix A), whereas asking specific questions about availability of parental warmth and support for the adolescent with regard to dating issues may have been beneficial. Finally, it may have been advantageous to take into account additional dimensions when investigating dating partner identity exploration, such as quality of peer relationships (Furman, 1999; Meeus & Dekovic, 1995; Shulman & Scharf, 2000), expressivity or femininity within relationships (Bartle-Haring, 1997; Patterson et al., 1992; Zimmer-Gembeck & Petherick, 2006), or support-seeking within romantic relationships (Berndt & Keefe, 1995; Collins & van Dulmen, 2006; Seiffge-Krenke, 2003).

#### *Conclusion and Future Directions*

Overall, this study yielded important and useful results for understanding identity formation processes that may be occurring in dating relationships among adolescents. That is, both parental warmth and support and comfort with intimacy were shown to have important implications for identity formation among high school adolescents. These findings are important because previous studies have not specifically tested whether parent-adolescent relationship or romantic attachment variables directly or indirectly influence adolescents' exploration of the dating partner identity. In fact, this is the first study to explicitly examine adolescents' exploration of their dating partner identities.

Future research directions should include testing these associations with a larger sample more representative sample of the general population of high school adolescents.

Furthermore, it would also be useful for researchers to examine influences on parental warmth and support in the adolescent relationship, and to conduct longitudinal studies on the associations among these and other relevant variables in order to use multiple timepoints and test directionality of relationships among variables.

The value of examining identity development within the interpersonal domain, and especially within the context of adolescent dating relationships, is evidenced by the links between variables found in this study. Future research in this area would be an important addition to the empirical literature base because of the importance of identity development during adolescence and the salience of romantic relationships for adolescents. Thus, this general area of inquiry, and more specifically the interpersonal domain of dating partner identity or who one is as a dating partner, is a fruitful area for future research in understanding various aspects of both identity development and romantic relationship development during adolescence.

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## APPENDICES

Appendix A

Data Collection Instruments

*Demographics Items*

**Age**

1. Date of Birth: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Month/Day/Year

**Gender**

2. Sex: (A) Male (B) Female

**Family Structure (Parental Marital Status)**

3. Who do you live with all the time (or the most time if you live in multiple households):

- (A) *Both* of your original (biological or adoptive) parents
- (B) An original (biological or adoptive) parent *and* a stepparent
- (C) A single parent
- (D) A relative but not a parent (Grandparent, Aunt, Uncle, Sister, etc.)
- (E) Other \_\_\_\_\_  
(Please specify)

4. Which statement best describes the CURRENT relationship between your original biological/adoptive parents? (CIRCLE YOUR CHOICE AND FOLLOW DIRECTIONS):

- (A) Married to each other – Skip boxes, go to Item 12, below
- (B) Never married to each other
- (C) Divorced from each other

B1. Did your original mother ever marry anyone else after you were born?  
(A) Yes (B) No

B2. If Yes, how old were YOU at that time?  
\_\_\_\_\_ Age in years

B3. Did your original father ever marry anyone else after you were born?  
(A) Yes (B) No

B4. If Yes, how old were YOU at that time?  
\_\_\_\_\_ Age in years

B5. Has either of your original parents experienced a divorce since you were born?  
(A) Yes (B) No

C1. Did your original mother remarry?

(A) Yes (B) No

C2. If yes, how old were YOU at that time?

\_\_\_\_\_ Age in years

C3. Did your original father remarry?

(A) Yes (B) No

C4. If Yes, how old were YOU at that time?

\_\_\_\_\_ Age in years

C5. Has either of your original parents experienced a second divorce?

(A) Yes (B) No

### **Dating Experience**

5. Have you ever had a dating relationship (going out) that lasted a month or more?

(A) Yes (B) No

6. Are you currently dating (going out) with someone? (A) Yes (B) No

If YES, Answer this 6a. How long (in months) have you been dating (going out)?

\_\_\_\_\_ months (If less than 1 month, please enter "0")

7. How long did this most recent relationship last?

\_\_\_\_\_ months (If less than 1 month, please enter "0")

8. Think back over your experience with dating or "going out."  
How many dating partners have you had more than one date with?

(Circle the number of partners you have dated)

0 1 2 3 4 5 6 7 8 9 10 More than 10

**9. Quality of Relationship Inventory (QRI; Pierce, Sarason, & Sarason, 1991)**

Think about the parent(s) or parent-figure(s) you spend the most time with. Please describe how you feel about these relationships. Use the scale below to indicate how much the statement describes this/these relationships.

1 = Not at all  
 2 = A Little Bit  
 3 = Quite a Bit  
 4 = Very Much

Not      A Little      Quite      Very  
                  At All      Bit      A Bit  
    Much

- 
- a. To what extent can you turn to a parent (parent-figure) for advice about problems? .....1.....2..... 3      4
  - b. To what extent could you count on a parent (parent-figure) for help with a problem?.....1.....2.....3      4
  - c. To what extent can you count on a parent (parent-figure) to give you honest feedback, even if you might not want to hear it? .....1.....2.....3      4
  - d. To what extent can you count on a parent (parent-figure) to listen to you when you are very angry at someone else? .....1.....2.....3      4
  - e. To what extent can you count on a parent (parent-figure) to distract you from your worries when you feel under stress? .....1.....2.....3      4



**10. Experiences in Close Relationships (ECR; Brenman, Clark, & Shaver, 1998)**

The following statements concern how you feel when you are in a romantic relationship. Think about all such relationships you have had, not just a current one. If you have never had a relationship that you would consider “romantic”, please answer the questions for how you expect you would feel if you were in such a relationship.

1 = Strongly Disagree

2 = Disagree a Little Bit

3 = Neutral or Can’t Decide between Disagree or Agree

4 = Agree a Little Bit

5 = Strongly Agree

a.	I prefer not to show a partner how I feel deep down.....	1	2	3	4	5
b.	I am very comfortable being close to romantic partners.....	1	2	3	4	5
c.	I worry that romantic partners won’t care about me as much as I care about them.....	1	2	3	4	5
d.	I get uncomfortable when a romantic partner wants to be very close.....	1	2	3	4	5
e.	I worry a fair amount about losing my partner.....	1	2	3	4	5
f.	I often wish that my partners’ feelings for me were as strong as my feelings for him/her.....	1	2	3	4	5
g.	I want to get close to my romantic partner, but I keep pulling back.....	1	2	3	4	5
h.	I am nervous when romantic partners get too close to me.....	1	2	3	4	5
i.	I worry about being alone.....	1	2	3	4	5
j.	My desire to be very close sometimes scares people away.....	1	2	3	4	5
k.	I try to avoid getting too close to my partner.....	1	2	3	4	5
l.	I need a lot of reassurance that I am loved by my partner.....	1	2	3	4	5
m.	I prefer not to be too close to romantic partners.....	1	2	3	4	5
n.	I find that my romantic partners don’t want to get as close as I would like.....	1	2	3	4	5
o.	I usually discuss my problems and concerns with my partners.....	1	2	3	4	5
p.	When I’m not involved in a relationship, I feel somewhat anxious and insecure.....	1	2	3	4	5
q.	It helps to turn to my romantic partner in times of need.....	1	2	3	4	5
r.	I resent it when my partner spends time away from me.....	1	2	3	4	5

**11. Utrecht-Management of Identity Commitments Scale (U-MICS; Crocetti, Rubini, & Meeus, 2008)**

For the questions on this page, think about the person you are dating these days.

ONLY ANSWER THESE QUESTIONS IF YOU ARE CURRENTLY DATING SOMEONE!

(Go to the next page if you are not currently in a dating relationship)

*Response categories:* Circle the number that most closely matches your opinion.

completely untrue	untrue	sometimes true/ sometimes not	true	completely true
1	2	3	4	5

UNTRUE                      TRUE

- a. I try to find out a lot about my dating relationship.                      1    2    3    4    5
- b. I often reflect on my dating relationship                                      1    2    3    4    5
- c. I make a lot of effort to keep finding out new things about my dating relationship.                      1    2    3    4    5
- d. I often try to find out what other people think about my dating relationship.                      1    2    3    4    5
- e. I often talk with other people about my dating relationship.                      1    2    3    4    5

## Appendix B

Table 12.

*Eigenvalues for Anxiety Parcels*

Item	Parcel 1	Parcel 2	Parcel 3
Anxiety 1	<b>.777</b>	-.037	.259
Anxiety 2	<b>.697</b>	.383	.003
Anxiety 3	<b>.741</b>	.249	.102
Anxiety 4	.299	<b>.592</b>	.294
Anxiety 5	.152	.188	<b>.759</b>
Anxiety 6	.404	<b>.540</b>	.122
Anxiety 7	.123	.045	<b>.798</b>
Anxiety 8	.027	<b>.667</b>	.442
Anxiety 9	.118	<b>.764</b>	-.066

Note: Bolded items were used to form the composites for each parcel.

Table 13.

*Inter-item Correlations for Anxiety*

Item	Anx. 1	Anx. 2	Anx. 3	Anx. 4	Anx. 5	Anx. 6	Anx. 7	Anx. 8	Anx. 9
Anxiety 1									
Anxiety 2	.37**	.							
Anxiety 3	.41**	.49**							
Anxiety 4	.28**	.45**	.33**						
Anxiety 5	.26**	.20**	.23**	.33**					
Anxiety 6	.31**	.36**	.35**	.36**	.26**				
Anxiety 7	.23**	.15**	.21**	.22**	.40**	.20**			
Anxiety 8	.21**	.26**	.28**	.47**	.35**	.31**	.30**		
Anxiety 9	.16**	.29**	.28**	.26**	.16**	.36**	.13**	.31**	

\*\* $p < .01$

## Appendix C

Table 14.

*Eigenvalues for Avoidance Parcels*

Item	Parcel 1	Parcel 2	Parcel 3
Avoidance 1	.150	.171	<b>.798</b>
Avoidance 2	<b>.558</b>	.435	-.325
Avoidance 3	<b>.681</b>	.242	.147
Avoidance 4	.493	.006	<b>.591</b>
Avoidance 5	<b>.763</b>	.093	.226
Avoidance 6	<b>.663</b>	-.041	.297
Avoidance 7	<b>.773</b>	.086	.074
Avoidance 8	.027	<b>.845</b>	.191
Avoidance 9	.160	<b>.837</b>	.021

*Note:* Bolded items were used to form the composites for each parcel.

Table 15.

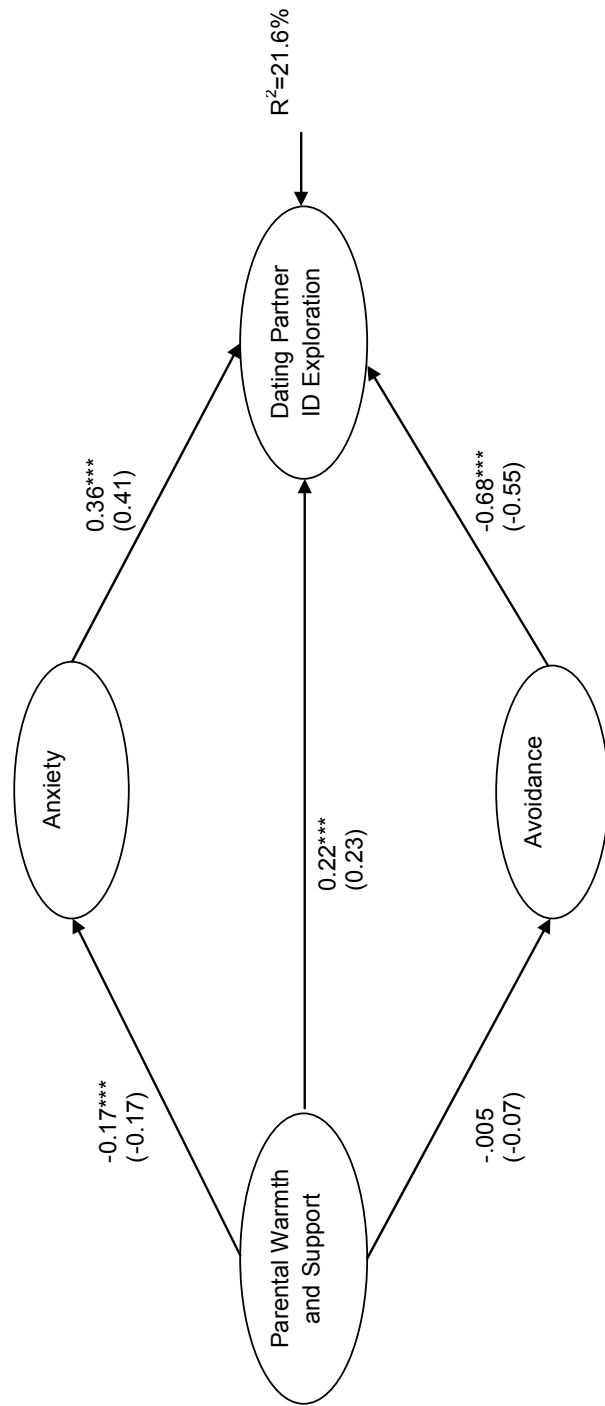
*Inter-item Correlations for Avoidance*

Item	Avd. 1	Avd. 2	Avd. 3	Avd. 4	Avd. 5	Avd. 6	Avd. 7	Avd. 8	Avd. 9
Avoidance 1									
Avoidance 2	.12**	.							
Avoidance 3	.24**	.29**							
Avoidance 4	.32**	.14**	.36**						
Avoidance 5	.26**	.35**	.53**	.52**					
Avoidance 6	.27**	.18**	.37**	.37**	.41**				
Avoidance 7	.24**	.32**	.45**	.32**	.46**	.52**			
Avoidance 8	.18**	.26**	.21**	.14**	.16**	.12**	.15**		
Avoidance 9	.14**	.30**	.31**	.11**	.19**	.13**	.23**	.53**	

\*\* $p < .01$

Appendix D

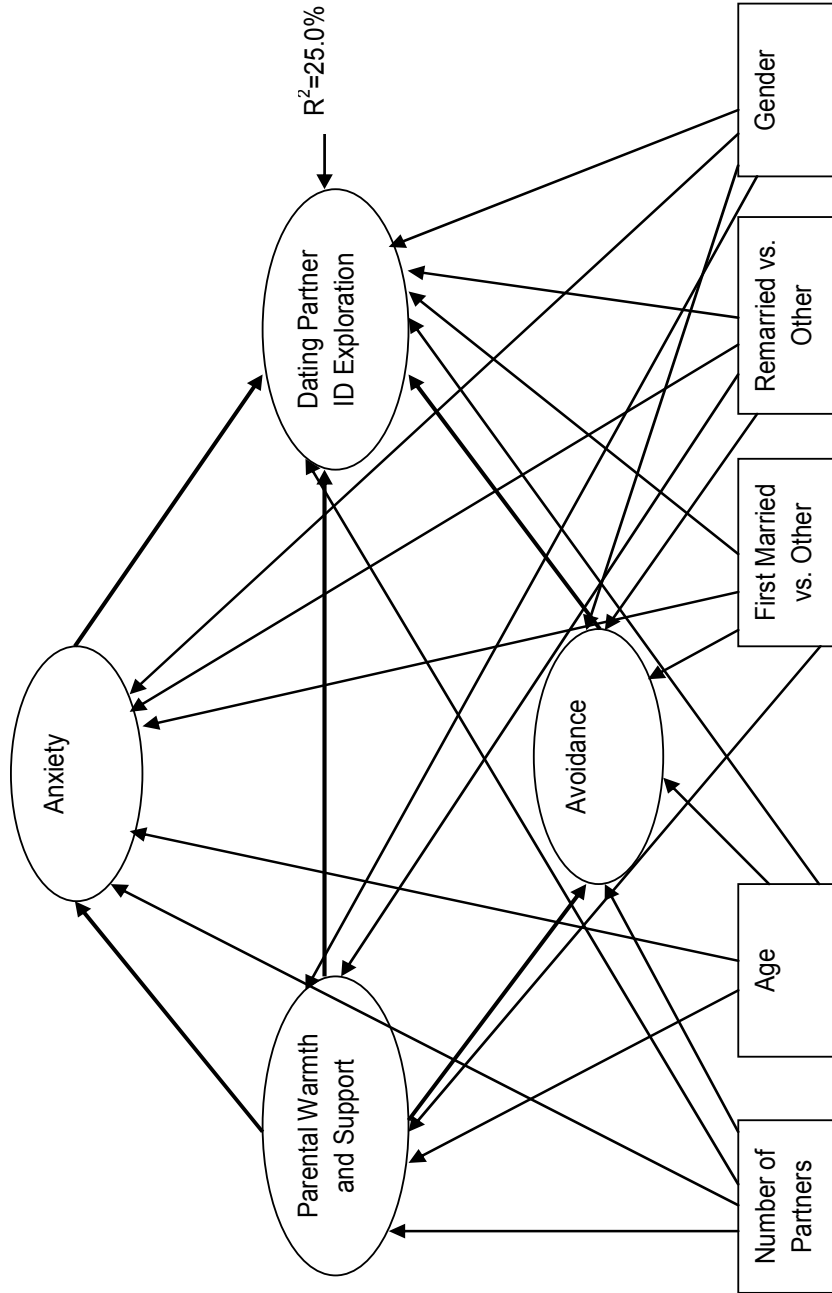
Figure 2. Hypothesized structural model with predictors only (M2) (N = 882).



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

Note: Error variances of Anxiety and Avoidance were also correlated, although this is not shown in the current figure. Standardized coefficients are shown in parentheses.

Figure 3. Full hypothesized structural model (M3) (N = 882).



Note: Error variances of Anxiety and Avoidance were also correlated, although this is not shown in the current figure.

For path coefficients, see Table 5.

Appendix F

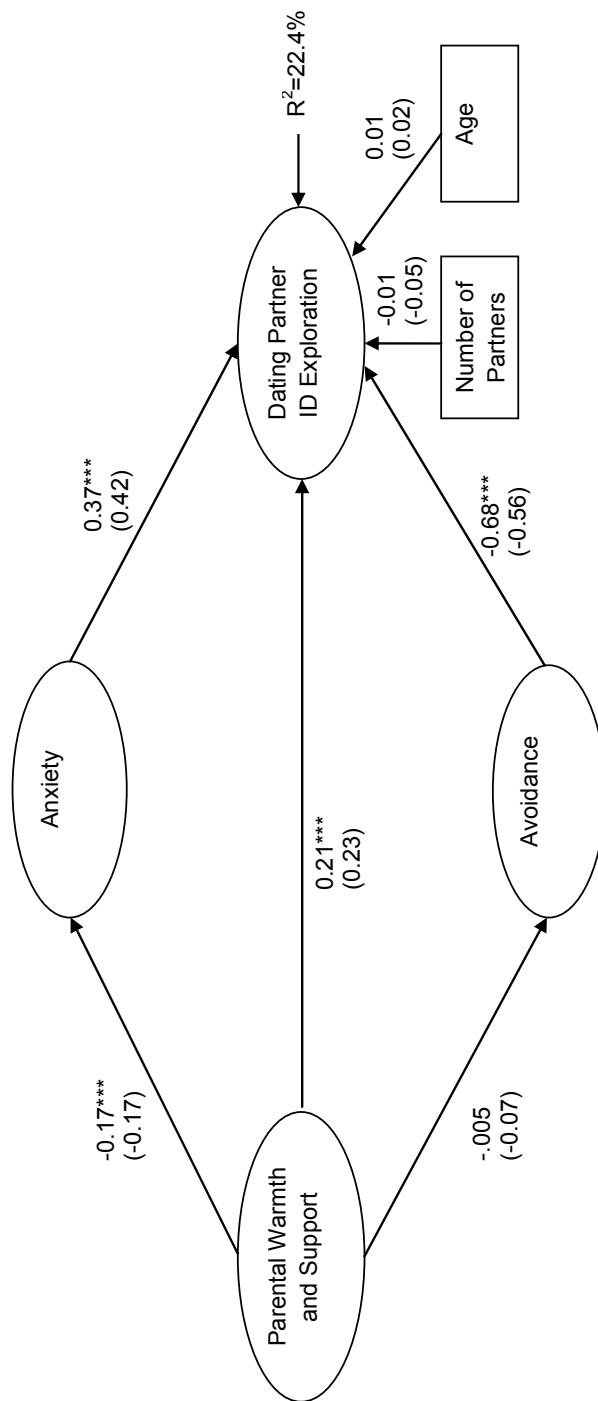


Figure 4. Trimmed model (M4) (N = 882).

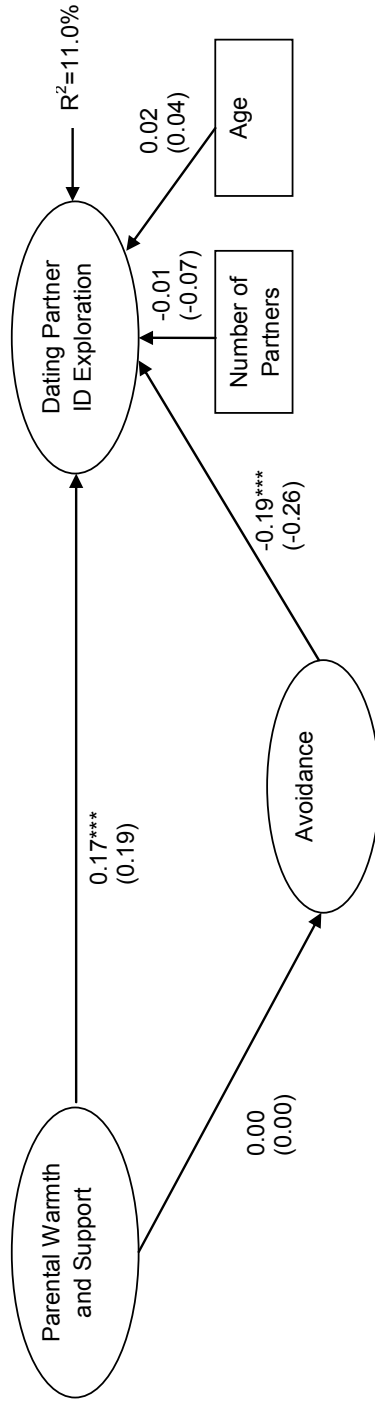
\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Note: Error variances of Anxiety and Avoidance were also correlated, although this is not shown in the current figure.

Standardized coefficients are shown in parentheses.

Appendix G

Figure 5. Trimmed model with anxiety removed and constrained path (M5) ( $N = 882$ ).



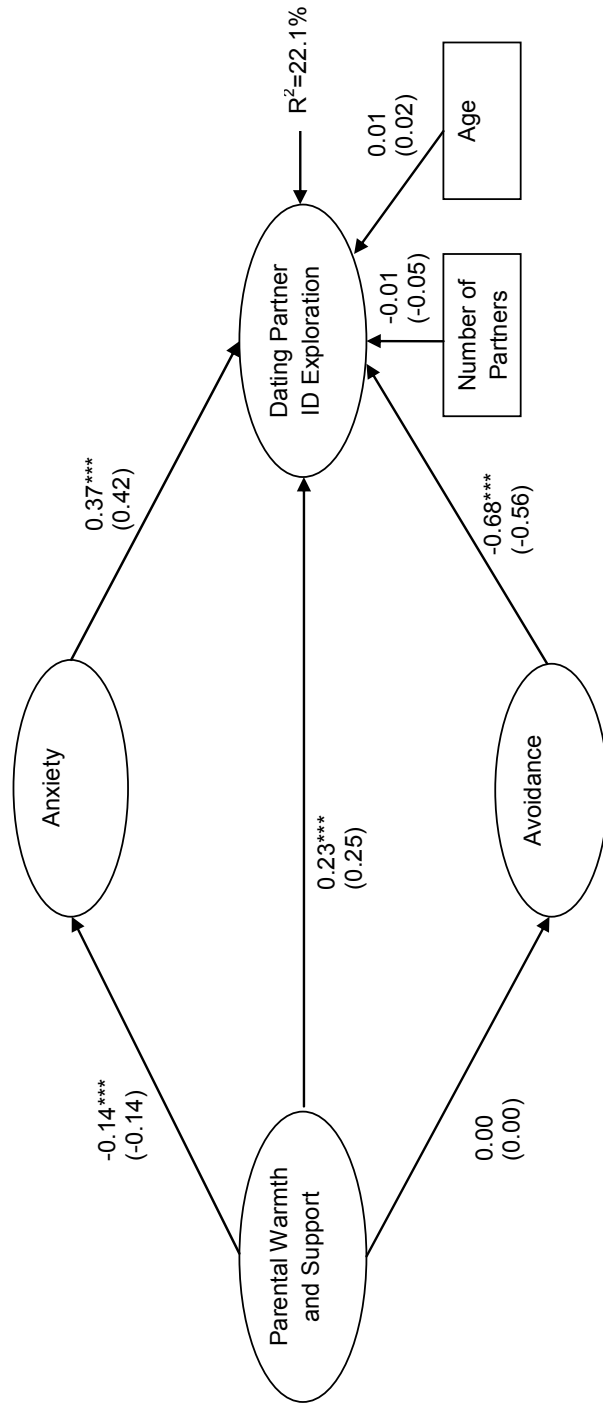
\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Note: Error variances of Anxiety and Avoidance were also correlated, although this is not shown in the current figure. Standardized coefficients are shown in parentheses.



Appendix H

Figure 6. Trimmed model with constrained path (M6) (N = 882).

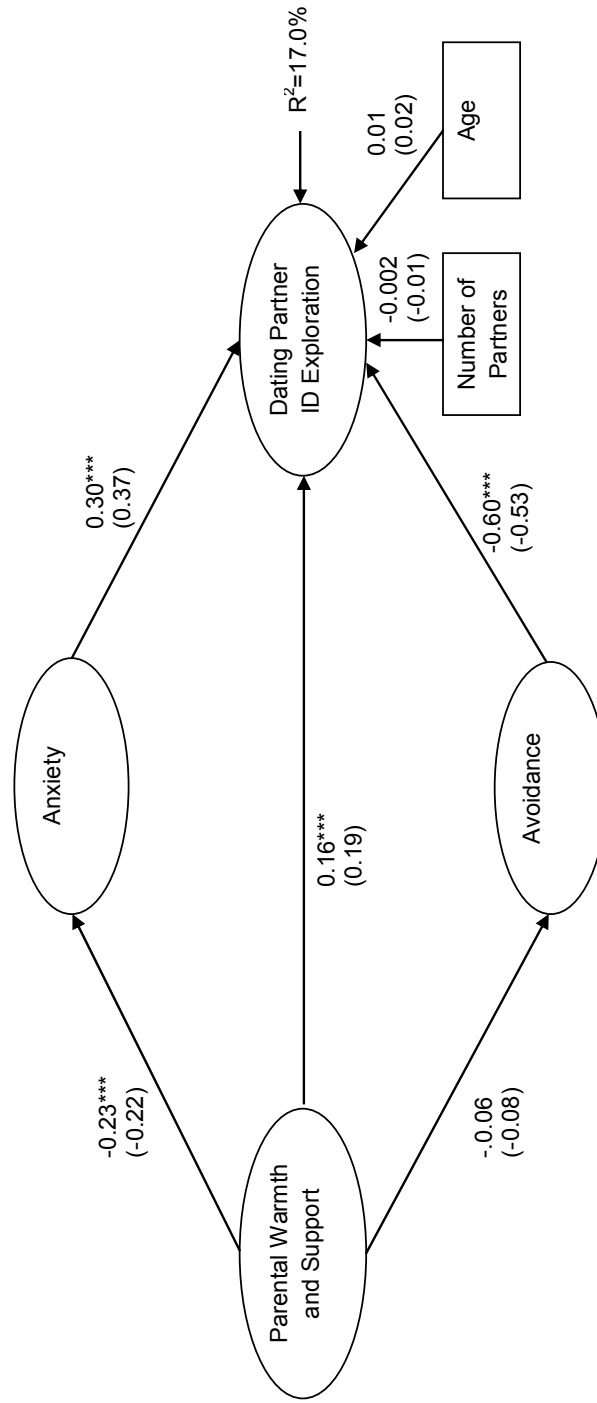


\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Note: Error variances of Anxiety and Avoidance were also correlated, although this is not shown in the current figure. Standardized coefficients are shown in parentheses.

Appendix I

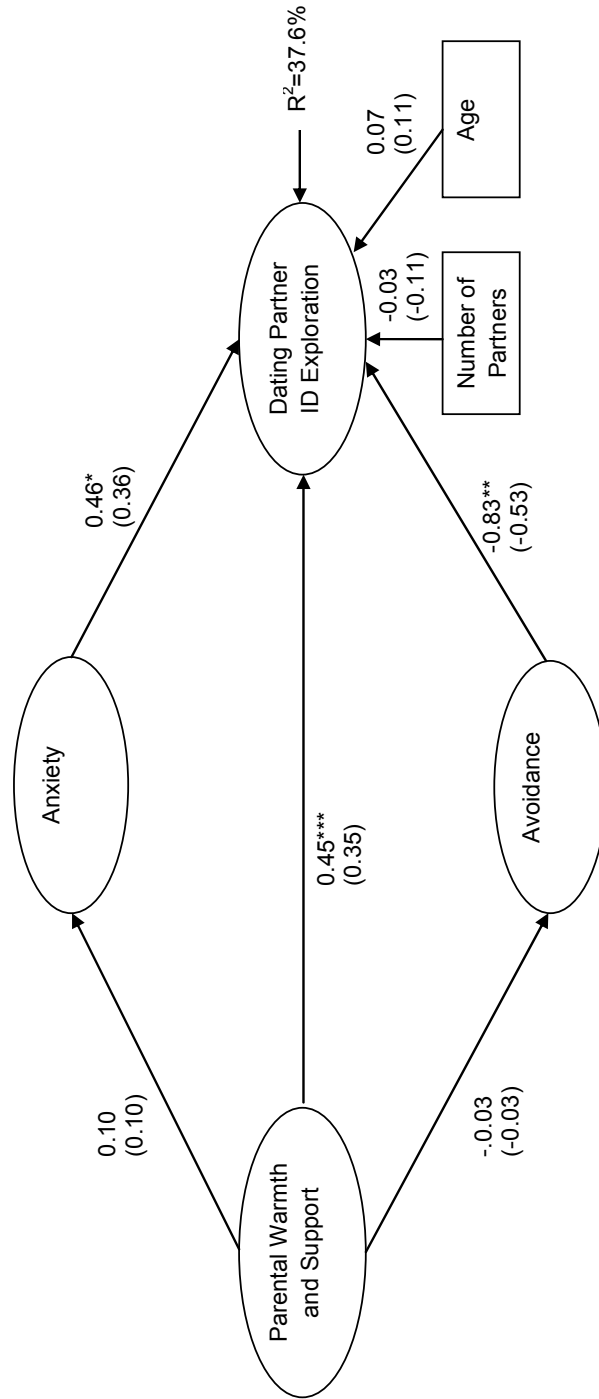
Figure 7. Trimmed model females (M9) (N = 719).



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

Note: Error variances of Anxiety and Avoidance were also correlated, although this is not shown in the current figure. Standardized coefficients are shown in parentheses.

Figure 8. Trimmed model males (M10) (N = 154).

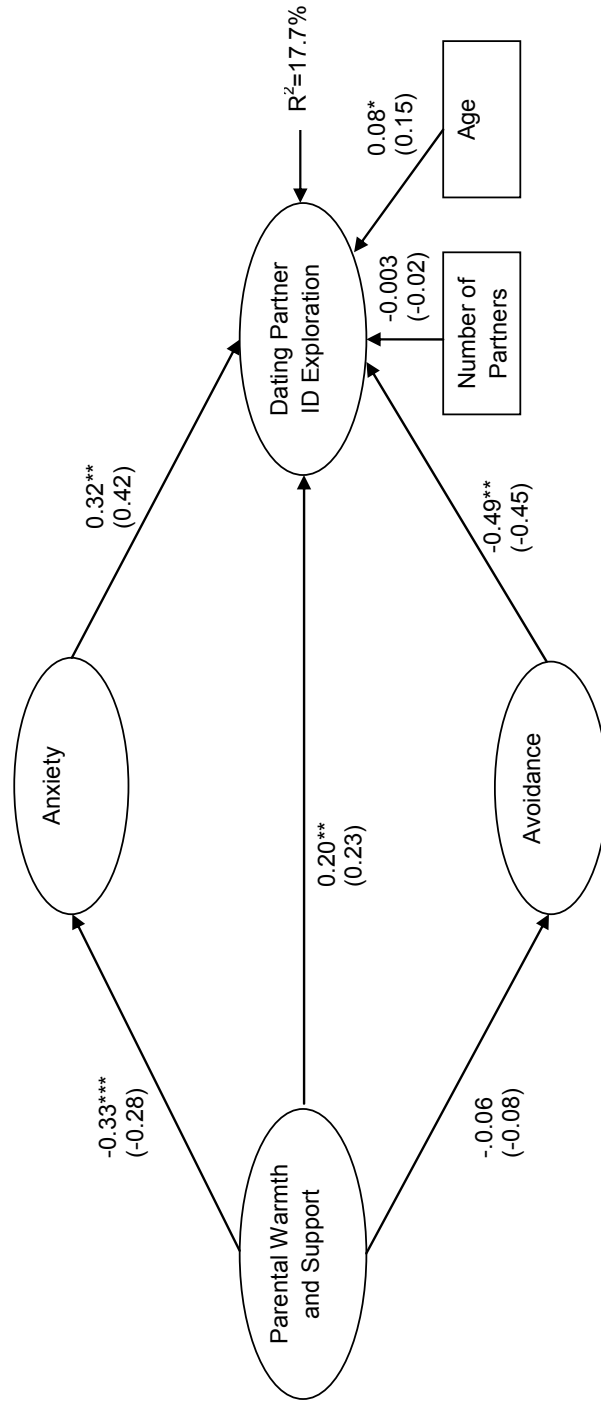


\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Note: Error variances of Anxiety and Avoidance were also correlated, although this is not shown in the current figure. Standardized coefficients are shown in parentheses.

Appendix K

Figure 9. Trimmed model single parent (M14) (N = 262).

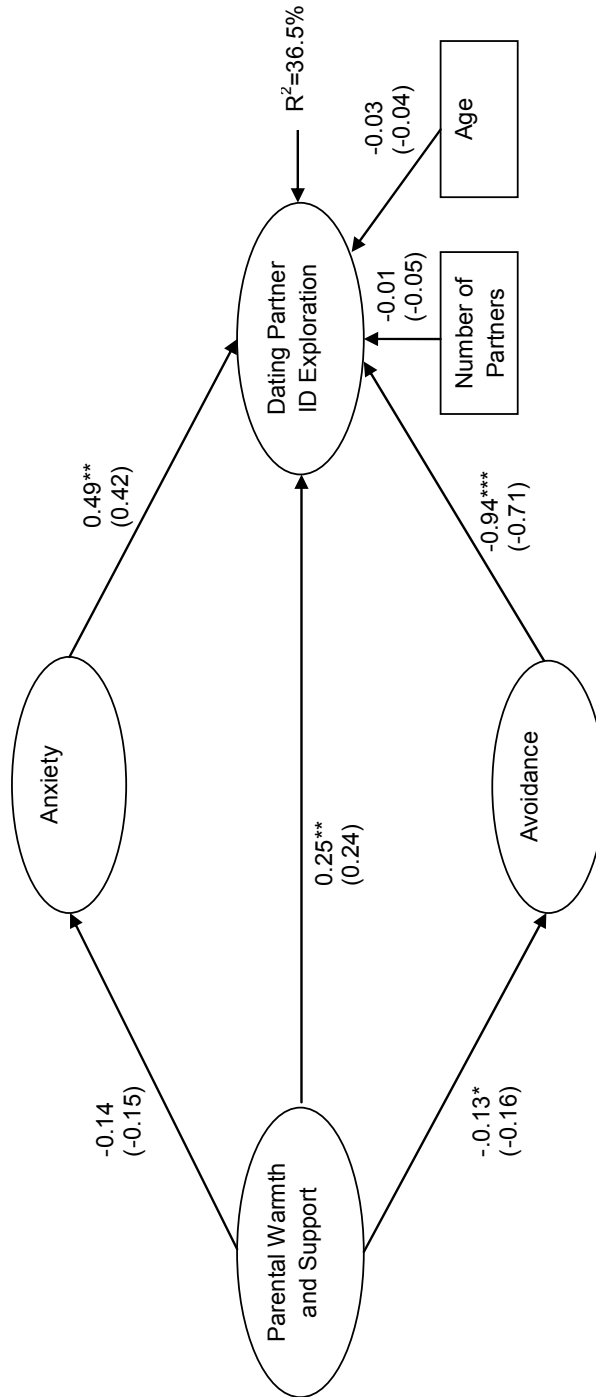


\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Note: Error variances of Anxiety and Avoidance were also correlated, although this is not shown in the current figure. Standardized coefficients are shown in parentheses.

Appendix L

Figure 10. Trimmed model first married parent (M15) (N = 281).

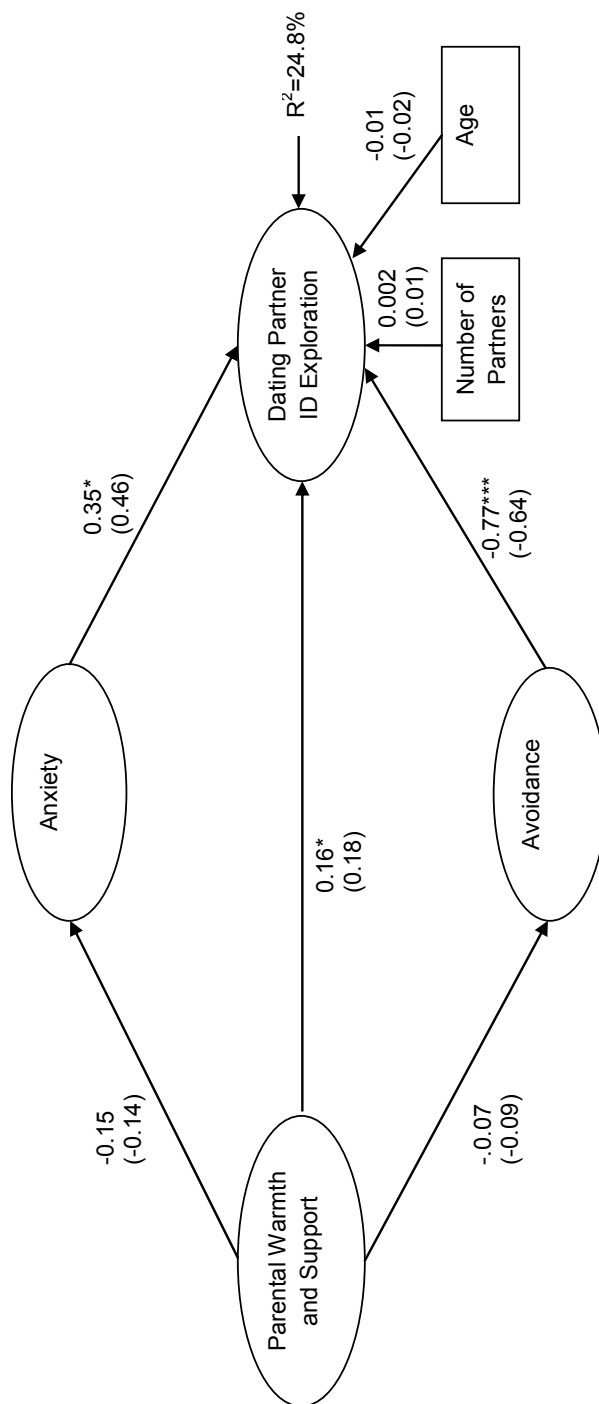


\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Note: Error variances of Anxiety and Avoidance were also correlated, although this is not shown in the current figure.

Standardized coefficients are shown in parentheses.

Figure 11. Trimmed model remarried parent (M16) (N = 226).



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

Note: Error variances of Anxiety and Avoidance were also correlated, although this is not shown in the current figure.

Standardized coefficients are shown in parentheses.

Appendix N

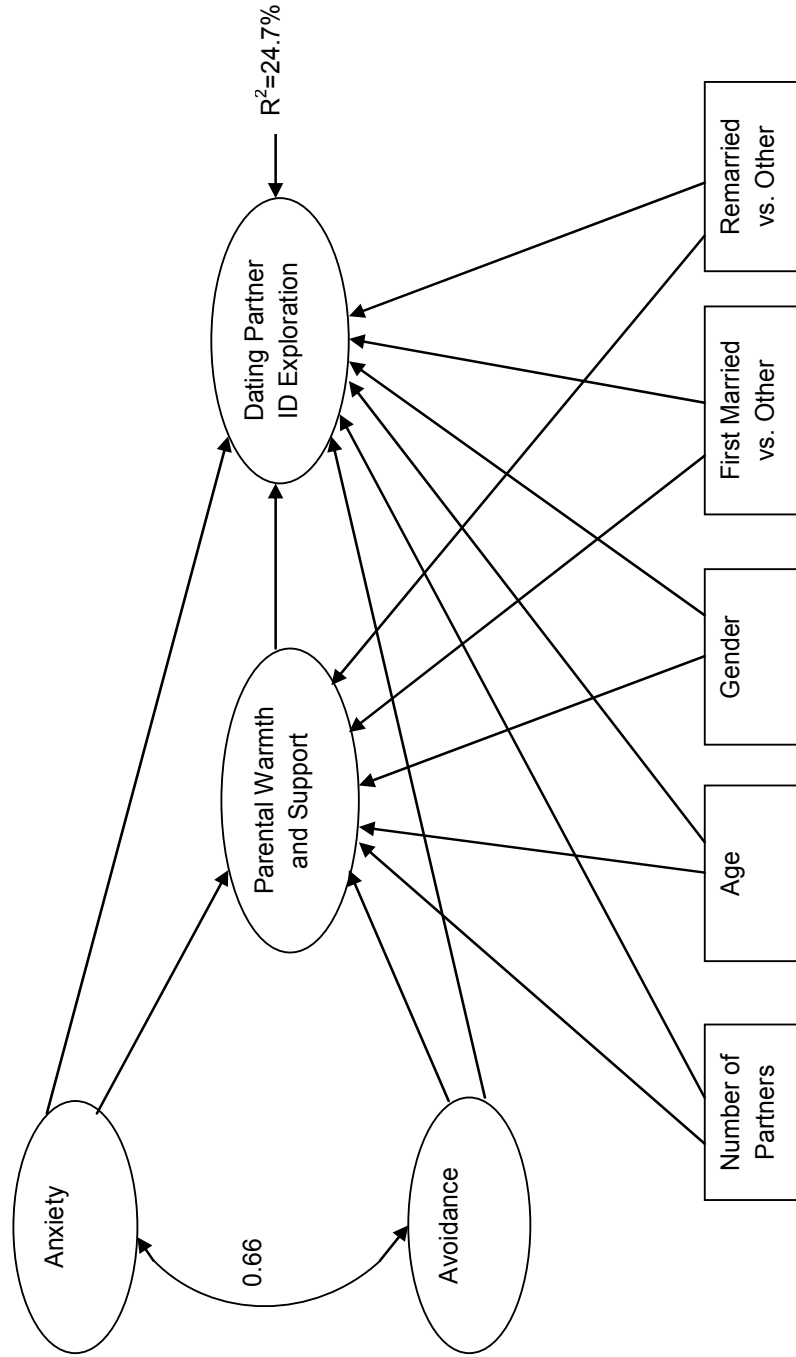


Figure 12. Alternate model (M17) (N = 882).

Note: For path coefficients, see Table 11.