Early Adolescents' Attitudes about Engaging in Risky Relationship Behaviors: The Influence of Support, Control, and Self-esteem

by

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Abstract

The current study examined the influence of adolescents' self-esteem, and support and control in their relationships with parents and best friends on attitudes about risky sexual behavior and dating violence. Participants were 717 early adolescents attending public high schools across a Southern state. Results indicated that best friend support and self-esteem were negatively associated with adolescents' attitudes about risky sexual behavior and dating violence. Parental psychological control and best friend possessiveness predicted greater acceptance of dating aggression. Positive associations were found between parent and best friend support and self-esteem, and negative associations were found between parental psychological control and self-esteem. Counter to expectations, self-esteem did not mediate associations among support/control and attitudes. However, an indirect effect was found with parent support predicting self-esteem, which in turn predicted attitudes about risky sex. No gender differences were found in the strength of associations. Implications for future research are discussed.

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I. INTRODUCTION

Involvement in romantic relationships typically begins during adolescence. Even in early adolescence, many youth indicate they have experience with romantic relationships. A recent study showed approximately half of a diverse sample of sixth graders reported having a boyfriend or girlfriend in the past three months (Simon, Miller, Gorman-Smith, Orpinas, & Sullivan, 2010). Although previously thought of as superficial and trivial (Collins, 2003; Furman & Shaffer, 2003) romantic relationships have been found to influence adolescents' identity development, academic success, and career interests (Furman & Shaffer, 2003), as well as serve as sources of support (Furman, 2002). In addition, increased self-esteem, self-confidence, and social acceptance can result from involvement in romantic relationships that are supportive and respectful (Richards, Crowe, Larson, & Swarr, 1998; Zimmer-Gembeck, Siebenbruner, & Collins, 2001). Despite these many positive outcomes, unhealthy behaviors within romantic relationships, such as aggression, control, and sexual pressure have been shown to be associated with poorer academic performance, depressive symptoms, increased drug and alcohol use, and poor self-esteem (Ackard, Neumark-Sztainer, & Hannan, 2003; Kaplan, Jones, Olson, & Yunzal-Butler, 2013). Furthermore, pregnancy and sexually transmitted diseases are potential negative outcomes associated with involvement in dating relationships during adolescence (Furman, 2002).

It is the overall aim of this study to examine adolescents' attitudes about risky relationship behaviors. Adolescents' attitudes about sexual behavior and dating violence, in particular, are important to study given the significant associations between attitudes (also referred to as beliefs) and behaviors (e.g., Lichter & McCloskey, 2004; Masters, Beadnell, Morrison, Hoppe, & Gillmore, 2008), as well as the greater capacity for educational programs

(which often are short term in implementation) to change adolescents' attitudes compared to changing their behaviors (e.g., Adler-Baeder, Kerpelman, Schramm, Higginbotham, & Paulk, 2007; Gardner & Boellaard, 2007; Kerpelman, Pittman, Adler-Baeder, Eryigit, & Paulk, 2009). Although most early adolescents are not engaging in dating violence or risky sexual behavior, rates have been shown to increase through adolescence (Sears, Byers, & Price, 2007). Thus, prevention efforts should aim to educate early adolescents on healthy and unhealthy relationship attitudes, as it is during this time that youth are beginning, or thinking about, involvement in romantic relationships but not yet engaging in high rates of risky relationship behaviors. Although there is a consistent association found between attitudes and behaviors, little research has focused on factors that influence adolescents' attitudes about dating violence and risky sexual behaviors.

The current study helps to fill this gap by addressing relational and individual predictors of adolescents' attitudes about risky sexual behavior and dating violence. At the individual level, adolescent self-esteem is a noteworthy factor given its association with both positive and negative relationship experiences (e.g., Kerpelman, McElwain, Pittman, & Adler-Baeder, 2013; Zimmer-Gembeck et al., 2001). At the relational level, relationships with parents and friends, because of their capacity to influence choices adolescents' make (e.g., Price & Hyde, 2011; Richards & Branch, 2012) are particularly important to consider when elucidating influences on adolescents' attitudes about engaging in dating violence and risky sexual behaviors.

In conjunction with empirical support, two theoretical frameworks, and two associated concepts, are used to guide our research. First, attachment theory purports that adolescents use both parents and friends as sources of support, guidance, and comfort, and relationships with parents and friends serve as the foundation of future relationships such as romantic partnerships

(Allen & Land, 1999; Markiewicz, Lawford, Doyle, & Haggart, 2006). Linked with attachment theory is the concept of internal working models. Internal working models guide adolescents' expectations for interactions with attachment figures and beliefs about the self (Bretherton & Munholland, 2008; Shaver, Collins, & Clark, 1996). Additionally, youth develop relational schemas (one component of internal working models) from their interactions with parents and close friends, and these schemas inform adolescents' expectations for future relationship interactions (Baldwin, 1992; Shaver et al., 1996). Therefore, when parent and friend relationships are supportive, youth expect that future relationships also should be supportive, and youth believe that they are worthy of receiving love and support (Bowlby, as cited in Baldwin, Keelan, Fehr, Enns, & Koh-Rangarajoo, 1996; Pittman, Keiley, Kerpelman, & Vaughn, 2011). Alternatively, when parent and friend relationships are controlling, youth develop similar schemas (or expectations) for future relationship interactions. Finally, we apply Cast and Burke's theory of self-esteem, which indicates that individuals seek validation from others for their identity (i.e., who I am), and that self-esteem (i.e., whether I believe I am a person of worth) tends to be higher when others communicate their approval (or support) of one's identity. Cast and Burke also indicate that higher self-esteem buffers against negative outcomes (e.g., depression, anxiety).

In the current study, we examine parent support, friend support, parental psychological control, friend possessiveness, and self-esteem as predictors of adolescents' attitudes about dating violence and risky sexual activity. Before addressing relational and individual predictors of adolescents' attitudes about risky relationship behavior, however, the links between attitudes and behaviors are examined to document this important association.

Dating Violence Attitudes and Behaviors

Teen dating violence encompasses a range of aggressive and abusive behaviors toward a current or past intimate partner (The Centers for Disease Control and Prevention (CDC), 2012). In the current study we address beliefs about psychological and physical dating violence. Psychological abuse involves threats, verbal intimidation, and other acts of coercion such as isolation, controlling the partner, making all of the decisions, and humiliating the partner by calling them names (Saltzman, Fanslow, McMahon, & Shelley, 2002). Physical abuse is defined by Saltzman et al. as "the intentional use of physical force with the potential for causing death, disability, injury, or harm" (p. 35). This would include behaviors such as pushing, shoving, hitting, and slapping. Rates of aggression in adolescent dating relationships vary from as low as 9% to over 50% depending on the sample being studied, the definition of dating violence, and measures used to assess dating violence (CDC, 2011; Ellis, Crooks, & Wolfe, 2009; Glass et al., 2003).

Increasing attention is being given to adolescent experiences of dating violence (Harned, 2002; Malik, Sorenson, & Aneshensel, 1997). This increase is likely due to the rates of dating violence reported in these early romantic relationships. Among samples of high school youth, dating violence has been associated with a number of negative outcomes such as dieting, eating disorders, cigarette smoking, alcohol consumption, drug use, suicidal thoughts, depression, risky sexual activity, and poor self-esteem (Ackard, Eisenberg, & Neumark-Sztainer, 2007; Ackard, Neumark-Sztainer, & Hannan, 2003; Lormand et al., 2013).

Extensive research suggests a moderate association between attitudes about violence and actual violence in dating relationships (e.g., Ali, Swahn, & Hamburger, 2011; Farrell et al., 2012; Nash & Kim, 2007; Simon et al., 2010). In studies that have examined gender differences, varied

associations between attitudes and behaviors have been found. For example, Reeves and Orpinas (2012) found weak to no association between attitudes supporting aggression and aggressive behaviors among females. In contrast, another study showed that females who held attitudes that violence was justified to meet personal needs were more likely to perpetrate dating violence, whereas males were more likely to perpetrate violence when they were more accepting of violence-related behaviors in dating relationships (McDonnell, Ott, & Mitchell, 2010). Although some studies have found gender differences in the strength of the association between attitudes and behaviors, most findings indicate that some association exists for both males and females.

Sexual Attitudes and Behaviors

In addition to experiencing violence and aggression, some adolescents in dating relationships are engaging in risky sexual behaviors such as early sexual intercourse and lack of condom use. Examining attitudes about involvement in sexual behaviors among early and middle adolescents is important as research suggests between 6% and 18% of youth had sexual intercourse before age 14 (CDC, 2011; Kaplan et al., 2013) and nearly 40% of high school youth did not use a condom during last sexual intercourse (CDC, 2011). The rates of engagement in risky sexual behavior vary based on race/ethnicity and gender. For example, Kaplan et al. found that 39% of urban adolescents had engaged in sex before age 14; however, their sample included predominantly Hispanic and African American youth (70%). Other research shows that African American and Hispanic populations engage in sex earlier than European American populations do (e.g., 13.9% of African American and 7.1% of Hispanic youth reported engaging in sex before age 13 compared to 3.9% of European American youth; CDC, 2011; Doljanac & Zimmerman, 1998).

Similar to attitudes about aggression and aggressive behavior in dating relationships, previous research also suggests an association between attitudes toward sexual involvement and actual sexual behaviors. In fact, adolescents' attitudes about sex are the strongest predictors of engagement in sexual behavior (Akers et al., 2011; Kirby, 2002). Adolescents' attitudes have been examined in several ways. For example, studies assessing attitudes have included intentions to engage in a sexual behavior, the expectation of engaging in a sexual behavior, and beliefs about the costs and benefits associated with engaging in specific sexual behaviors. Regardless of the measure of attitudes, associations between attitudes about sex and actual sexual behaviors have been found consistently across studies.

In summary, the literature shows that adolescents are engaging in risky behaviors in their romantic relationships. Rates of dating violence and risky sexual behavior indicate a need to examine predictors of adolescents' beliefs about engaging in such behaviors. There is a consistent association found in the literature between adolescents' attitudes about risky relationship behaviors and their engagement in these behaviors. Therefore, identifying factors that matter for adolescents' attitudes is important in terms of prevention and intervention programming efforts. It also is important to assess predictors of attitudes in early adolescence before most youth begin engaging in risky dating behavior. Two potential important relational influences to examine are relationships with parents and friends, as they both play a vital role in a range of adolescents' attitudes, behaviors, and decisions. Furthermore, the role of self-esteem as a predictor of attitudes about dating violence and sexual behavior is important to examine given past associations found in the literature between self-esteem and both dating violence and sexual behavior.

Support in Relationships with Parents and Best Friends

Parent support. Greater parent-child connectedness and involvement have been associated with more prosocial behavior and fewer problem behaviors (e.g., substance use) among early adolescents (Day & Padilla-Walker, 2009; Fosco, Stormshak, Dishion, & Winter, 2012). Furthermore, according to Day and Padilla-Walker, involvement of one parent can serve as a protective factor against adolescent internalizing behaviors when the other parent is less involved. In particular, parental support has been shown to have positive implications on adolescent development such as influencing self-esteem and identity exploration (Kerpelman et al., 2013). Parental support also can buffer against adolescent engagement in risky relationship behaviors. Parental support has been found to predict later sexual debut (Price & Hyde, 2011), increased condom use (Parkes, Henderson, Wight, & Nixon, 2011), and attitudes less accepting of dating violence (Pflieger & Vazsonyi, 2006). Although research suggests individual attitudes about engaging in risky relationship behavior are most predictive of actual engagement, parental support is important to consider as an influence on adolescents' attitudes.

Best friend support. Similar to parents, friends also are instrumental in adolescent development. Much research focuses on the negative influence peers have on adolescents' decisions, attitudes, and behaviors, with less research examining the positive influence of friends. For example, early adolescents who believed their friends used or were accepting of the use of alcohol and cigarettes showed greater intention to use these substances (Trucco, Colder, Bowker, & Wieczorek, 2011), and association with deviant peers has been found to be related to higher rates of engaging in substance use among a sample of early adolescents (Van Ryzin, Fosco, & Dishion, 2012). However, having positive friend influences (e.g., "my friends try to do what is right") can be protective against adolescent substance use (Dunn, Kitts, Lewis, Goodrow, &

Scherzer, 2011). Less research has examined the role of friend support on adolescents' attitudes about risky relationship behaviors and engagement in such behaviors. From the research that has been conducted, peer support has been linked with lower rates of dating violence perpetration (Richards & Branch, 2012); however, findings on the role of friend support on adolescent engagement in risky sexual behavior have been mixed, showing associations with higher and lower sexual risk-taking (Kalina et al., 2011; Ramiro, Teva, Bermúdez, & Buela-Casal, 2013). Therefore, the nature and relative contributions of friend and parent support to adolescents' attitudes about dating violence and risky sexual behavior warrant further examination.

Controlling Behavior in Relationships with Parents and Best Friends

Parental psychological control. Literature has shown that having supportive parents is associated with more positive adolescent outcomes; however, not all youth have parents who are supportive. Some youth have parents who attempt to control their thoughts and feelings through the use of manipulation strategies such as guilt induction and love withdrawal (Barber, 1996). This type of control is referred to as parental psychological control and can be thought of as one counter measure to parent support. Parental psychological control has been linked with a range of negative outcomes. For example, in a diverse sample of high school youth, parental psychological control was associated with higher rates of problem behavior (e.g., minor delinquency, school misconduct) and internalizing behaviors (e.g., depression), and a more negative self-concept (e.g., self-esteem; Silk, Morris, Kanaya, & Steinberg, 2003). In addition, literature indicates that greater psychological control is associated with higher rates of dating violence perpetration, greater likelihood of engaging in high-risk sexual behaviors, and lower self-esteem (Bean, Bush, McKenry, & Wilson, 2003; Boudreault-Bouchard et al., 2013; Leadbeater, Banister, Ellis, & Yeung, 2008; Rodgers, 1999).

Best friend possessiveness. In addition to having parents who use psychologically controlling parenting strategies, youth may also develop friendships with adolescents who are controlling. Controlling or jealous behavior exhibited by friends is often referred to as possessiveness, and possessiveness can occur when an individual feels that their relationship with a friend is being threatened by their friend's relationship with someone else (Parker, Low, Walker, & Gamm, 2005). Research on friend possessiveness is limited, with the few studies found focusing on the outcomes of the possessive friend and not on the outcomes of the youth with the possessive friend. It seems probable, however, that youth who have jealous or possessive friends may also experience some adverse outcomes. One study found higher rates of adolescent-reported aggression within friendships characterized by jealousy and dominance (Kouwenberg, Rieffe, & Banerjee, 2013). Despite limited empirical findings on friend possessiveness, theory on relational schema, as well as findings on the role of parental psychological control suggest that this may be an important predictor of adolescents' attitudes about risky sexual behavior and dating violence. Friend possessiveness has also been associated with lower adolescent self-esteem (Kouwenberg et al., 2013), and past research has shown that self-esteem is consistently associated with adolescent risky relationship behaviors (Ethier et al., 2006; Jones & Gardner, 2002). Therefore, it is important to consider the role that an adolescent's self-esteem plays in adolescents' beliefs about risky relationship behaviors, as well as how relationships with significant others, such as parents and friends might influence self-esteem.

Self-esteem

Self-esteem refers to an individual's evaluation of self. It has often been examined in the literature using a version of the Rosenberg Self-Esteem Scale (Rosenberg, 1965; 1979; 2005),

which measures positive and negative feelings about oneself such as worthiness, satisfaction, and respect. Low self-esteem has been associated with negative outcomes both concurrently and longitudinally. Adolescents with low self-esteem are more likely to be depressed, have an anxiety disorder, be dependent on tobacco, or have more physical health problems in early adulthood compared to those with higher self-esteem (Trzesniewski et al., 2006). In addition, lower self-esteem has been associated with adolescents engaging in unprotected sexual intercourse (Ethier et al., 2006) and using verbal aggression in dating relationships (Jones & Gardner, 2002). Alternatively, high self-esteem has been shown to be associated with less depression and anxiety (Moksnes, Moljord, Espnes, & Byrne, 2010), fewer problem behaviors (Siyez, 2008), and greater comfort when talking about sex (Chapman & Werner-Wilson, 2008). Thus, it is anticipated that self-esteem will be associated with adolescents' attitudes about both dating violence and risky sexual behavior. Adolescents with higher self-esteem, compared to those with lower self-esteem, would be expected to reject beliefs about behaviors that pose a threat to the self, such as risky sexual behavior and dating violence. In addition, having supportive parents (Parker & Benson, 2004; Weber, Puskar, & Ren, 2010) and supportive friends (Colarossi & Eccles, 2003; Siyez, 2008) is associated with higher self-esteem, whereas parental psychological control (Bean et al., 2003; Linver & Silverberg, 1995) and friend possessiveness (Kouwenberg et al., 2013) are associated with lower self-esteem. Thus, parents and friends might influence adolescent risky relationship behaviors and attitudes directly, but also indirectly through their impact on adolescent self-esteem. Some studies have found this to be the case (e.g., Kerpelman et al., 2013; Pflieger & Vazsonyi, 2006).

Gender as a Moderator

Mean differences by gender have been found for risky relationship behaviors and attitudes, parent and friend support and control, and self-esteem. In the literature addressing adolescents' attitudes about engaging in risky relationship behaviors, males were found to hold more normative beliefs about engaging in risky relationship behaviors (Huesmann & Guerra, 1997; Nash & Kim, 2007) than females do. In addition, males are more likely to report greater benefits than costs associated with engaging in risky sexual behaviors than were females (Deptula, Henry, Shoeny, & Slavick, 2006). Females, however, tend to hold more positive attitudes about abstinence (Masters et al., 2008) and to believe that there are negative outcomes associated with engaging in risky relationship behaviors more than males do (Rostosky, Regnerus, & Wright, 2003). Findings are mixed in terms of the role of gender in the strength of the associations between peer support and risky relationship behaviors and attitudes. Studies have found that friends influence adolescent involvement in risky relationship behaviors among females more often than among males (Ramiro et al., 2013; Richards & Branch, 2012). However, despite differences in the impact of peer support, the literature shows that parent support influences risky relationship behavior and attitudes across gender. Parental psychological control also is consistently associated with higher rates of relational aggression among males and females; however, greater sexual risk-taking was found only among females with psychologically controlling parents (Leadbeater et al., 2008; Rodgers, 1999). Mean differences in self-esteem by gender also were found, such that males had higher self-esteem than females had (Bachman, O'Malley, Freedman-Doan, Trzesniewski, & Donnellan, 2011; Moksnes et al., 2010). In addition, Sharpe and Taylor (1999) found that high self-esteem is protective against female involvement in a violent dating relationship, but it is a risk factor for

male involvement in a violent dating relationship. Thus, we will explore whether gender moderates associations among support, control, self-esteem, and attitudes about dating violence and risky sexual behavior.

Aims of the Current Study

Because romantic relationships often are initiated during early and middle adolescence, it is important to begin examining these relationships at their earliest stages. Additionally, potential involvement with dating violence and engagement in risky sexual behavior during adolescence make it vital to identify who and what influences such behaviors. There is extensive research on the negative outcomes associated with dating violence and risky sexual behavior, and there is substantial research to suggest a consistent link between attitudes about aggression and aggressive behavior, as well as attitudes about sex and sexual behavior. Less research, however, has focused on predictors of adolescents' attitudes than on predictors of behavior. Given that attitudes are potentially the strongest predictors of adolescent behaviors, we need to better understand the factors influencing them. Specifically, we will examine the positive (support) and negative (psychological control/possessiveness) influence of relationships with parents and best friends, as well as adolescents' self-esteem on attitudes about dating violence and risky sexual behavior. We also will explore whether parent support/psychological control or best friend support/possessiveness is more strongly associated with adolescents' attitudes about dating violence and sexual behavior. In addition, we will test whether self-esteem mediates associations between support/control and attitudes, and whether gender moderates associations among support, control, self-esteem and attitudes about dating violence and risky sexual behavior (see Figure 1).

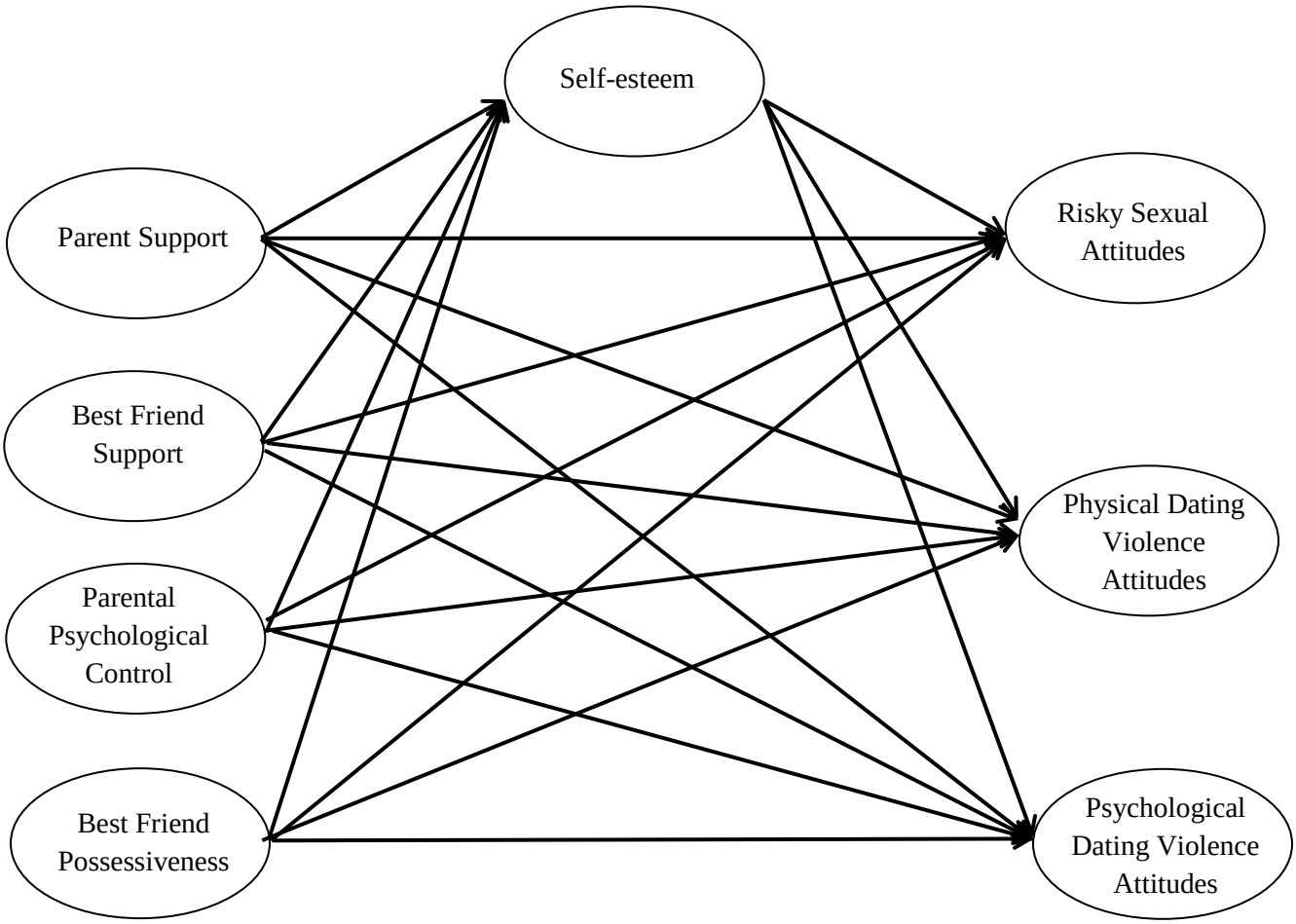

Figure 1. Hypothesized model of the relationship between parent and best friend support and control/possessiveness, self-esteem, and risky sexual and dating violence attitudes

Note: Paths from parent and best friend support to self-esteem are expected to be positive; paths from support and self-esteem to the risky relationship attitudes are expected to be negative; paths from control/possessiveness to self-esteem are expected to be negative; paths from control/possessiveness to risky relationship attitudes are expected to be positive. Gender will be tested as a moderator of all associations.

II. LITERATURE REVIEW

Adolescents' engagement in risky sexual behavior and dating violence has negative implications for adolescents' well-being. Although adolescents' attitudes about sexual behavior and dating violence are important predictors of adolescents' behaviors (e.g., Ali et al., 2011; Lichter & McCloskey, 2004; Rostosky et al., 2003), few studies have examined factors associated with these attitudes. The literature review that follows has four main sections. First, guiding theories are reviewed. Second, how attitudes (used interchangeably with beliefs across studies) about sex and dating violence are associated with sexual and dating violence behaviors are addressed. Examining literature addressing associations between attitudes and behavior will help demonstrate the importance of better understanding individual and relational predictors of attitudes. Third, parents and peers as two primary sources of influence on adolescents' sexual and dating violence attitudes and behaviors are reviewed. Fourth and finally, the role of self-esteem as a predictor of adolescents' attitudes and potential mediator of the relationships between support/control and attitudes about dating violence and sexual behaviors will be discussed.

Guiding Theories

Guiding our research are attachment theory, and specifically the concept of internal working models (Bowlby, 1969/1980), Baldwin's (1992) concept of relational schema, and Cast and Burke's theoretical framework of self-esteem. According to attachment theory, secure, supportive relationships with parents in the earliest stages of life are important for healthy development. Furthermore, attachment theory suggests that having a secure relationship with parents and peers remains important throughout adolescence (Allen & Land, 1999; Markiewicz et al., 2006). One study found that while parents continued to serve as the primary secure base

for early adolescents, best friends were more likely to be relied on for support and comfort (Markiewicz et al., 2006). Importantly, younger adolescents were more likely than older adolescents and young adults to turn to both parents and best friends as primary sources of support. Markiewicz and colleagues suggest that during adolescence attachment functions become more reciprocal in that adolescents both give and receive support from close friends, and these supportive relationships with close friends stem from earlier attachment with parents. Therefore, adolescents who have secure attachments with parents are more likely to have secure attachments with friends, with these secure attachments forming the basis of supportive future relationships and healthy relationship attitudes. The reverse also is true. Adolescents who have less secure attachments with parents are more likely to have less secure attachments with friends, with these less secure, supportive relationships being associated with greater acceptance of unhealthy relationship behaviors.

Linked with attachment theory is the concept of internal working models. Internal working models are cognitive representations or mental models of the self and attachment figures that guide attachment behavior (Bretherton, 1996; Bretherton & Munholland, 2008; Bowlby, as cited in Baldwin et al., 1996). Through early parent-child interactions, children form expectations for how their parents will respond to them. This working model then informs expectations for one's own and other's behavior in future interactions. Thus, a child whose parents provide reliable positive responses to their needs will expect similar responses in the future, and a child who receives inconsistent or negative responses from their parents would likely come to expect inconsistent or negative future responses. Internal working models contain several interrelated components, one being relational schemas, which are cognitive mechanisms that underlie attachment styles (Baldwin, Fehr, Keedian, Seidel, & Thomson, 1993; Shaver et al.,

1996). Furthermore, schemas are "organized representations of past behavior and experience that function as theories about reality to guide a person in construing new experiences" (Baldwin, 1992, p. 468). Therefore, adolescents' past experiences provide them with a guide for responding in similar situations and in forming expectations for how others will respond to them. Adolescents would then come to expect, based on their positive or negative past experiences, that certain behaviors are to be expected in future relational interactions. These expectations inform their beliefs and attitudes about relationship behaviors such as the acceptability of dating violence and risky sex.

Not all adolescents have positive parent-child relationships but instead experience psychologically controlling parenting. In these relationships, adolescents develop internal working models in alignment with these experiences of control. For example, youth may not attempt to share their opinion on a topic because the expected response from the parent is disapproval or dismissal of their opinion. Parental psychological control involves restricting the development of psychological autonomy and lower rates of psychological autonomy granting have been found among adolescents with less secure attachment relationships (Karavasilis, Doyle, & Markiewicz, 2003). Thus, autonomy formation can be stunted among adolescents with parents who use psychologically controlling parenting strategies. Restricting adolescents' autonomy through the use of psychological control would likely inhibit their ability to make their own decisions and lead to a reliance on others. Consequently, adolescents may be more accepting of engaging in risky relationship behaviors in attempt to comply with others' expectations or instructions. Furthermore, as suggested by the concept of relational schemas, youth learn to expect certain behaviors and responses based on past experiences. Thus,

experiencing psychologically controlling parenting behavior would likely lead to greater acceptance of similar behavior in other, future relationships.

Friends also play an influential role in the lives of adolescents. As indicated by Markiewicz and colleagues (2006), best friends become more prominent sources of influence as youth transition into adolescence. Best friends would be thought, then, to impact adolescents in ways similar to parents. For example, friendship experiences also would inform adolescents' relational schemas, with controlling, or possessive friendships leading adolescents to develop schemas consistent with these friendship experiences. Alternatively, adolescents with supportive close friends would likely expect to receive support in their future interactions with friends. In addition, it seems likely that friendship-related schemas might also transfer somewhat to dating relationships. Thus, controlling and possessive friendships (as well as supportive friendships) may lead to expectations of similar behaviors in romantic partnerships.

Overall, parents and close friends matter for adolescents' beliefs about what behaviors are acceptable in other relationships. Parents and close friends serve as models of either positive or negative relationships, which in turn inform adolescents' schemas for future relationship interactions. Youth who have experienced supportive relationships with parents and friends, therefore, will expect supportive responses in future relationships, whereas youth who have experienced control/possessiveness in relationships with parents and friends will expect negative or controlling responses in future relationships. Therefore, interactions within these relationships provide information for adolescents to use in developing schemas for future relationships, and these schemas inform adolescents' beliefs about the acceptability of behaviors in dating relationships.

Adolescence also is a time of identity formation (defining oneself and ones fit in the broader world), and an important factor related to identity is self-esteem, or the evaluation of one's own self-worth. Cast and Burke (2002) developed a theoretical framework of self-esteem as an extension of identity theory. Their theory suggests that individuals look to others to verify their identity (i.e., who they are) and self-esteem tends to be higher when relationships support an individual's identity. Linking Cast and Burke's self-esteem theory with attachment theory, youth develop internal working models, or cognitive representations of themselves, based on how they have been treated in past relationships (Baldwin et al., 1996). Youth who have learned that their parents are supportive and responsive will likely develop a positive sense of self, because they believe that they are worthy of receiving love and support from others (Bowlby, as cited in Baldwin et al., 1996; Pittman et al., 2011). Alternatively, youth who feel less supported by parents and less worthy of their love and support may not believe they are worthy of receiving love and support from others. Similar to the influence of parents, supportive best friends would likely promote feelings of competence and self-worth, which would result in internalization of such feelings and, therefore, lead to higher self-esteem. Counter to that, controlling and possessive parents and best friends are more likely to promote feelings of dependence and low self-worth, therefore leading to lower self-esteem. Consequently, we expect that support from parents and best friends would positively influence self-esteem and control from parents and best friends would negatively influence self-esteem, and subsequently, attitudes about risky relationship behavior. In addition, Cast & Burke's theory of self-esteem (2002) indicates that high self-esteem buffers against negative outcomes (e.g., depression, anxiety), and there also is considerable empirical support for this association (Jones & Gardner, 2002; Trzesniewski et al., 2006; Zimmerman, Copeland, Shope, & Dielman, 1996).

Overall, having higher self-esteem, or holding beliefs that one is worthy, matters in adolescent decision-making (Güçray, 2005; McElroy, Seta, & Waring, 2007). It influences the type of relationship a person believes they deserve and can deter them from staying in relationships that are unhealthy. Having higher self-esteem might lead adolescents to believe that they are worthy of a certain level of commitment, or love, from a partner before engaging in sex, or deserve to be in a violence-free relationship. Thus, it would seem that self-esteem would be important not only for how adolescents feel about themselves, but also for how they believe they should be treated by others (and how they should treat others), particularly in dating relationships. Therefore, it is important not only to identify how support and control are associated with self-esteem, but also to examine whether higher self-esteem is related to attitudes associated with lower approval of dating violence and risky sexual behavior.

Attitudes about Dating Violence

Dating violence in adolescent relationships is of great concern given the high prevalence of aggression reported (e.g., 9% to over 50%, CDC, 2011; Ellis et al., 2009). Rates of dating violence vary based on how dating violence is defined and the sample used in the study. Some studies examined physical violence only, whereas others included multiple forms of violence such as psychological, sexual, and physical. Similarly, studies assessing aggression in relationships might look broadly at general aggression, whereas others look more specifically at types of aggression such as retaliatory or sex-specific (e.g., male-to-female). In the current study, we are interested in attitudes associated with psychological and physical dating violence. Although the association between attitudes and behaviors has been examined across different ages of youth, little is known about the predictors of adolescents' attitudes.

Associations between dating violence attitudes and behaviors. The association between attitudes and behaviors has been well documented in the literature (e.g., Lichter & McCloskey, 2004; Masters et al., 2008; Simon et al., 2010). Among studies of youth, samples have ranged from elementary age to college age students. Although most studies we found included both male and female adolescents, two studies focused on exclusively male samples, while one study focused solely on females. For example, Robinson, Paxton, and Jonen (2011) examined the degree to which individual and community factors predicted aggressive behavior among 80 at-risk, low-income, African American male adolescents. Findings indicated that normative beliefs about aggression (defined as "beliefs about the acceptability of aggressive responses"; e.g., "It's usually OK to push or shove other people around if you're mad") predicted general interpersonal aggression and aggressive responses.

A second study focusing exclusively on males addressed the association between aggressive beliefs and behaviors among a younger sample of 249 fourth and fifth grade boys from Singapore (Lim & Ang, 2009). The sample was predominantly Chinese (57%) with an average age of 11 years. It was found that general normative beliefs about aggression predicted physical (e.g., hitting, slapping), verbal (e.g., belittling), and relational (e.g., spreading rumors) aggression. Furthermore, specific normative beliefs about retaliatory aggression against males predicted engagement in physical, verbal, and relational aggressive behavior. However, this relationship was not significant when examining normative beliefs about retaliatory aggression against females.

One study focusing exclusively on females found similar associations. The relationship between normative beliefs about aggression and aggressive behavior was examined among a sample of 122 predominately European American (88%) seventh and eighth grade girls (Werner

& Nixon, 2005). Normative beliefs about relational and physical aggression positively and significantly predicted relationally and physically aggressive behavior.

Although the previous studies focused specifically on the association between attitudes and behaviors among males and females independently, other studies have examined gender differences in this association. Huesmann and Guerra (1997) studied the relationship between normative beliefs about aggression and aggressive behavior among elementary school students. This association, and its stability over time, was examined using data from two longitudinal studies. Their first longitudinal study included 1,550 first grade and 766 fourth grade girls (52%) and boys (48%) from ethnically diverse (38% African American, 37% Hispanic, 18% White), low-income homes. Participants reported on their beliefs about the acceptability of using aggression while peers and teachers reported on children's actual aggressive behaviors using peer nominations and the Child Behavior Checklist (Achenbach, 1978, 1991). The researchers found strong correlations between normative beliefs and aggressive behavior, particularly with peer-rated aggression, among first and fourth grade students. Assessments at one-year follow-up indicated that beliefs were more stable among fourth graders than first graders. In addition, the association between beliefs and behaviors was stronger for boys, and boys reported overall higher scores on normative beliefs than girls did.

In their second longitudinal study, the sample included 1,015 students who were in first, second, and fourth grade at time one. Follow-up data were collected from each grade group one and two years after initial data collection. There were approximately equal numbers of boys and girls in the sample and equal numbers representing each grade level. Huesmann and Guerra (1997) found that approval of aggression increased for each grade cohort, with the most notable change between first and second grade. Differences by grade were also found in the relationship

between normative beliefs and aggressive behaviors such that aggressive behavior predicted later normative beliefs among younger children, but normative beliefs significantly predicted later aggressive behavior among older children. Perhaps early exposure to peers and their behaviors influenced children's beliefs, which later influenced the child's own behavior.

A recent longitudinal study examined the link between disapproving beliefs about aggression and aggressive behaviors in dating relationships more specifically, as well as the effect of relationship education on this association. Pittman and Kerpelman (2013) assessed aggressive attitudes among a sample of 1,400 low-to-middle income adolescents. The sample included approximately equal numbers of male (48%) and female (52%) high school students and slightly more African American (48%) than White (43%) students. This study examined the effectiveness of relationship education immediately following program completion and at one- and two-year follow-up. The researchers found that knowledge gained from the relationship education classes was associated with disapproving attitudes toward aggression, which, in turn were concurrently and longitudinally associated with aggressive behaviors. Importantly, adolescents who held more disapproving attitudes at one year post program used less physical dating violence aggression two years post program. Beliefs disapproving aggression varied based on gender and socioeconomic status, such that males and students of lower socioeconomic status were less disapproving of aggression.

Also including students from low-income homes, Lichter and McCloskey (2004) assessed, longitudinally, the impact of childhood exposure to relationship aggression on adolescents' beliefs about gender roles and dating violence. The sample included 208 adolescents (average age of 16.7 years). Nearly half of the participants were male (49%) and predominantly White (53%) and Hispanic (36%). The sample included youth from homes in

which violence occurred and homes in which no or little violence was reported. Findings indicated that, regardless of childhood exposure to marital violence, attitudes accepting male-to-female violence significantly predicted adolescent dating violence. Although exposure to relationship violence during childhood was associated with adolescents' attitudes supporting dating violence, it did not predict adolescent perpetration, whereas attitudes about dating violence did predict adolescent perpetration.

In one of the few studies focusing exclusively on early adolescents, Farrell et al. (2012) examined beliefs about aggression using a diverse sample of 477 sixth grade middle school youth, and the association of these beliefs with aggressive and prosocial behaviors. The sample included one rural school with about equal numbers of Caucasian (45%) and African American (40%) students and two urban schools that were predominantly African American (84%) and of lower socioeconomic status (83% were eligible for subsidized lunch). Using latent class analysis, the researchers identified three groups of adolescents, those with beliefs against fighting (31%), those who believed fighting is sometimes unavoidable or necessary (41%), and those with beliefs supporting fighting (28%). Race/ethnicity and family structure influenced the likelihood of membership in a particular group, such that African American adolescents were more likely to be in the group with beliefs supporting fighting when compared to the group against fighting. Adolescents were more likely to be members of the group holding beliefs supporting fighting or the group with beliefs sometimes supporting fighting when residing with their mother and another adult (who was not the biological father) than those living in a household with both biological parents.

Adolescents with beliefs supporting fighting had higher levels of aggressive behavior. These individuals were also more likely to report intent to use physical aggression to solve

problems in hypothetical situations. Teacher ratings suggested similar associations. Teachers reported higher rates of aggression among adolescents with beliefs supporting fighting and beliefs that fighting is sometimes necessary, whereas adolescents holding beliefs against fighting had the highest rates of prosocial behavior. Furthermore, adolescents who held beliefs supporting fighting or beliefs that fighting is sometimes necessary reported having peers and parents who supported the use of aggression.

In a study focusing on both perpetration and victimization among 350 rural middle and high school youth (65% female; 58% white), McDonnell et al. (2010) found that holding beliefs that violence is generally justified or is acceptable when gaining something one wants predicted victimization and perpetration, respectively, among females. Beliefs justifying violence also predicted victimization among males; however, holding beliefs that violence in relationships is acceptable predicted perpetration among males.

Whereas most studies focused solely on physical aggression in dating relationships, Sears et al. (2007) examined attitudes as predictors of multiple types of aggression in adolescent dating relationships. Their sample included 309 girls and 324 boys, predominantly Caucasian, in grades 7, 9, and 11. Participants were from rural and urban areas of Canada and 79% lived with both biological parents. Nearly half of the participants (43% boys and 51% girls) reported using at least one form of aggression in their dating relationships. Rates of violence perpetration in dating relationships differed by grade with rates of perpetration higher among older youth. Thirty-three percent of seventh grade youth reported engaging in any type of abusive behavior, with psychological violence most commonly reported. Additionally, 19% of boys and 26% of girls reported using more than one form of aggression. Gender differences were found among predictors of adolescent perpetration of dating violence, such that attitudes toward women

predicted boys' own use of violence, but did not significantly predict the use of violence among girls. Adolescent boys and girls with more accepting attitudes toward physical and psychological dating violence were more likely to report using aggressive behaviors in dating relationships.

The studies reviewed thus far did not distinguish the direction of the dating violence (i.e., male-to-female or female-to-male). A few recent studies have examined attitudes by assessing male-to-female and female-to-male violence independently. The first study examined the relationship between physical dating violence norms and aggressive behaviors in dating relationships among a diverse sample of early adolescents. Simon et al. (2010) obtained a large sample of sixth grade youth from diverse geographic locations. Males and females were almost equally represented in the sample of 5,404 youth, with 48% African American, 21% Latino, and 18% Caucasian participants. Dating violence perpetration and victimization were measured among adolescents who reported involvement in a dating relationship over the past three months. Participants reported how often they had been the victim or perpetrator of physically violent behavior (e.g., kicking, scratching, throwing something at the person that could hurt) with their partner. Dating violence norms were measured using four items that assessed beliefs about female-to-male violence and four items assessing male-to-female violence (e.g., "boys/girls sometimes deserve to be hit by the boys/girls they date").

Over half of the males in the sample (60%) and nearly half of the females (45%) reported having a boyfriend or girlfriend. Of those in dating relationships, 42% reported victimization and 29% reported perpetration within the past three months. Additionally, females reported higher rates of perpetration (31% vs. 26%) and males reported higher rates of victimization (54% vs. 27%). In terms of perpetration, females more often used scratching and slapping, whereas males used punching and throwing objects. Results suggested that participants reported female-to-male

violence as more acceptable than male-to-female violence (53% and 27%, respectively). Rates of acceptance differed by relationship experience, race/ethnicity, and gender. Never having been in a dating relationship and being of Caucasian race/ethnicity were associated with less acceptance of dating violence. In addition, males were more likely to be accepting of male-to-female violence in dating relationships. Adolescents who reported acceptance of physical violence against a dating partner were more likely to report perpetration and victimization in their dating relationships.

Another study, conducted by Reeves and Orpinas (2012), examined dating norms and dating violence among a diverse sample (47% White, 38% African American, 11% Latino) of 624 ninth grade students (53% boys). The researchers assessed adolescents' agreement with norms supporting girls hitting boys and boys hitting girls. Results indicated support for both male-to-female (17% of the sample) and female-to-male (33% of the sample) violence. Findings also showed that African American youth were more supportive of female-to-male violence than all other race/ethnic groups, and that all race/ethnic groups were more supportive of male-to-female violence than White youth. In addition, findings revealed gender differences in the relationship between dating norms and dating violence such that the association was much stronger for males. That is, among males, beliefs supporting male-to-female and or female-to-male violence were more strongly associated with violence perpetration and victimization when compared to females.

Finally, Ali et al. (2011) examined whether sex-specific attitudes about dating violence were differentially associated with violent behaviors in dating relationships among a sample of adolescents from a high-risk community. The sample included 2,888 participants in grades 7, 9, 11, and 12 who reported involvement in a dating relationship within the past 12 months. Slightly

over half of the sample was female (52%). The sample was ethnically diverse with Hispanic (45%), African American (27%), and White (24%) participants well represented. A significant association between attitudes supporting hitting in dating relationships and physical dating violence perpetration was found. This association varied based on whether male-to-female or female-to-male violence was supported. That is, attitudes supporting male-to-female violence were associated with male perpetration and attitudes supporting female-to-male violence were associated with female perpetration.

Summary

Based on the reviewed literature, there is a clear association between attitudes about aggression and aggressive behavior in dating relationships. Overall, associations between attitudes and behaviors were moderate. This association was found among diverse samples, as well as among both older and younger youth, with participants ranging from early elementary school age to late adolescence. The literature also provides evidence that the association exists both concurrently and longitudinally. Some research focused on aggressive beliefs and behaviors more generally while others examined the association between beliefs about a specific type of aggression and that type of aggressive behavior. When examining the latter association, as well as overall rates of acceptance of dating violence, differences by gender and race/ethnicity were found. For example, some studies have found male and non-White adolescents to be more accepting of dating violence, as well as finding a stronger association in the relationship between attitudes and behaviors among males. In the few studies reporting rates of acceptance of dating violence, researchers found that 33% and 53% of adolescents reported female-to-male violence as acceptable and 17% and 27% of adolescents reported male-to-female violence as acceptable (Reeves & Orpinas, 2012; Simon et al., 2010). Conclusions can be made that attitudes and

behaviors, specifically attitudes about dating violence and aggression and violent and aggressive behavior, are associated. Rates of acceptance of dating violence among adolescents ranged from one-fifth to one-half, and the association between attitudes about dating violence and dating violence behaviors was modest. Therefore, adolescent attitudes are important factors to examine in attempt to further understand adolescent dating violence behavior.

Attitudes about Sexual Behavior

A second aim of the current study is to examine predictors of adolescents' attitudes about engaging in risky sexual behavior. Adolescent engagement in risky sexual behavior is of concern given that 6% to 18% of youth reported having sex by 14 years of age (CDC, 2011; Kaplan et al., 2013). Furthermore, nearly 40% of high school youth did not use a condom during last sexual intercourse (CDC, 2011). Similar to the link found between attitudes about aggression and aggressive behavior, literature supports an association between attitudes about sex and adolescents engaging in (risky) sexual behavior. Attitudes about sex can include specific beliefs about an individual's intention to engage in sex and beliefs about the costs, benefits, and potential outcomes associated with engaging in sex (Deptula et al., 2006; Lee, Lewis, & Kirk, 2011). This association between beliefs about sex and sexual behavior has been examined in samples of early adolescents to young adults. However, little is known about the predictors of adolescents' attitudes about sex.

Associations between attitudes about sex and sexual behaviors. Two dimensions of beliefs, intentions and expectations, have been examined in the literature as influences on adolescent behaviors. That is, intent to act or having positive or negative expectations for a behavior influences an individual's behavior. Two recent studies examined expectations of and intentions to engage in sexual behavior. In the first study, Bourdeau, Grube, Bersamin, and

Fisher (2011) examined the relationship between sexual expectancies and sexual behavior among a sample of 932 adolescents (48% female) who were predominantly European American (71%) and an average age of 14 years at wave one. Sexual expectancies were measured as beliefs about the likelihood that there will be positive (e.g., enjoying it, being more popular) or negative (e.g., get a bad reputation, lose self-respect) outcomes associated with engaging in sexual behaviors. At wave one, nearly 11% of participants reported having engaged in oral sex and 8% reported having engaged in vaginal intercourse. These rates increased substantially by wave three (approximately two years after initial data collection) to 31% (oral sex) and 24% (vaginal intercourse). Results indicated a significant association between social risk expectancies (e.g., get a bad reputation, lose self-respect) and sexual behavior. That is, adolescents who believed there were social risks associated with sexual behavior reported less sexual activity.

In another study, Lee et al. (2011) examined attitudes and intentions regarding condom use and sexual intercourse as predictors of actual condom use and engagement in sexual intercourse. The researchers hypothesized that beliefs and attitudes about sex would influence intentions to engage in sexual activities, which would influence sexual behavior. The study included a sample of 463 adolescents, ages 11 to 19, with approximately equal numbers of males and females and of diverse race/ethnicity (45% African American, 22% Caucasian, and 13% biracial). Using multiple regression analyses, intent to have sex and perceived likelihood of having sex significantly predicted sexual intercourse three months later. Additionally, adolescents' attitudes toward condom use predicted actual condom use, such that those with negative attitudes toward condom use (e.g., condom use means one is promiscuous) used condoms less often.

Two studies focused specifically on adolescents' attitudes about abstinence and whether these attitudes predicted sexual behavior. In the first study, Donnelly et al. (1999) examined abstinence attitudes among a sample of 839 inner-city middle school youth (48% boys) from New Jersey. Of the 839 participants, 10% of the girls and 30% of the boys reported ever having sexual intercourse. Attitudes regarding sex were measured using fifteen items (e.g., "sexual abstinence is the best choice for people my age when it comes to decisions about sex," "having sexual intercourse is just a normal part of teenage dating"). The researchers found that attitudes regarding sex were associated with whether youth remained abstinent, with those agreeing with statements such as "sexual abstinence is the best choice" being more likely to be abstinent. In other words, attitudes about sex and abstinence predicted whether adolescents engaged in sex.

In a second, more recent, study, Masters et al. (2008) examined the associations between attitudes about abstinence and sex and sexual behavior. Using a sample of 365 youth (63% female) from a larger, community-based study in Seattle, the researchers assessed longitudinally whether attitudes about abstinence and sex, as well intentions to remain abstinent or to engage in sex, were associated with sexual behaviors. Participants were an average age of 13 years at time one, and the majority of participants were of Black (47%), Asian/Pacific Islander (21%), and White (10%) race/ethnicity. Sexual attitudes were measured using six items (e.g., "do you think avoiding having sex (being abstinent) in the next six months would be…" with response options ranging from "very bad" to "very good"). Sexual intentions were also measured using six items (e.g., "In the next six months, do you intend/expect/plan to avoid (abstain from) having sexual intercourse?").

At time one, 11% of males and 4% of females reported sexual experience, with rates increasing to 22% and 12% one year later. Females had more positive attitudes about abstinence

and more positive intentions to remain abstinent than males did. Findings indicated that positive attitudes about abstinence and intentions to abstain from sex were associated with lower rates of sexual behavior six months later. Additionally, positive attitudes about having sex and intentions to have sex were associated with higher rates of sexual behavior six months later.

Several studies have used data from the National Longitudinal Study of Adolescent Health (Add Health), the largest most comprehensive longitudinal study using a nationally representative sample of adolescents in grades seven through twelve (Harris et al., 2009). Using a sample of 4,948 adolescents from Add Health, Meier (2003) examined whether attitudes about sex predicted adolescent engagement in first sex, as well as whether adolescents' attitudes changed following engagement in first sex. The majority (64%) of participants lived in two-parent households and were between 15 and 18 years of age. The racial/ethnic composition of the sample was White (69%), Black (10%), Hispanic (13%), Asian (6%), and other (2%). Attitudes about sex were measured using seven items that assessed perceived personal and relational costs and benefits associated with engaging in first sex (e.g., "if you had sexual intercourse, your friends would respect you more," "if you had sexual intercourse, it would upset your mother").

Approximately one-fifth of adolescents had engaged in first sex by time two, one year after initial data collection. Attitudes were only assessed among those participants who reported not having engaged in first sex at time one. Attitudes about sex significantly predicted sexual debut, such that more permissive attitudes about sex were associated with engagement in sex by time two. Additional analyses were conducted to examine whether having had sex influenced adolescents' attitudes about sex. Findings indicated a change in females' attitudes after engaging in first sex such that they became more permissive. However, having engaged in first sex did not affect males' later attitudes about sex.

Also using a sample drawn from Add Health, Rostosky et al. (2003) examined attitudes about sex as a predictor of sexual debut in adolescence. Attitudes about sex were measured at time one using 12 items that assessed the degree to which participants believed that engaging in sex would be associated with positive or negative emotions (e.g., "If you had sexual intercourse, afterward you would feel guilty"). The sample included 3,691 participants of diverse ethnicity who were ages 15 to 21 at time one.

Nearly 25% of participants reported sexual debut by follow-up, one year following initial data collection. Gender differences were found in attitudes about sex, such that females believed there would be more negative emotional outcomes associated with sexual intercourse while males believed there would be more positive outcomes. Findings indicated that beliefs that engaging in sexual intercourse would have negative emotional outcomes predicted reduced likelihood of sexual debut among males and females one year later. Additionally, beliefs that sexual intercourse would be associated with more positive emotional outcomes predicted greater likelihood of sexual debut among females one year later.

A third study using Add Health addressed adolescents' evaluation of the costs and benefits associated with choosing to engage in sexual behavior. Specifically, Deptula et al. (2006) examined these attitudes, and the relationship between attitudes and sexual behavior, among a sample of 8,003 youth. Participants were in grades seven through twelve at wave one of data collection. Age and gender differences were found in overall beliefs about engaging in sex. That is, older youth and males reported believing there were more benefits associated with engaging in sexual behavior, whereas younger youth and females reported higher costs. Results indicated that attitudes about the costs and benefits of engaging in sexual behavior predicted concurrent and future engagement in sexual behavior. Therefore, the two components of attitudes

assessed in this study, costs and benefits associated with engaging in sexual behavior, were both important in predicting adolescent engagement in sexual activity.

Summary

Overall, the research indicates strong support for a link between attitudes about sexual behavior and engagement in sexual behavior, such that attitudes about favorable outcomes resulting from sexual activity are associated longitudinally with engaging in sexual activity. The reverse also is true. Attitudes about the negative consequences of sexual activity are associated with less likelihood of engagement in sexual intercourse or unsafe sex practices. More specifically, the literature indicates that the odds of engaging in sexual behavior nearly doubles when adolescents hold positive attitudes about sex (i.e., more benefits, positive outcomes). The odds decrease by one-third to one-half when adolescents hold negative attitudes (i.e., more costs, negative outcomes) about sex. Gender differences were found in attitudes held, such that males believed there would be more benefits and more positive outcomes associated with engaging in sex. Alternatively, females believed there would be more costs and more negative emotional outcomes associated with engaging in sex, as well as held more positive attitudes toward abstinence.

Based on the reviewed studies, it is clear that there is an association between attitudes about sex and engaging in sexual behaviors. Importantly, most of the studies found this association among samples of adolescents from diverse populations. Studies focused primarily on adolescents, with rates of engaging in sexual behavior as high as 18% by 14 years of age to 31% by 16 years of age (Bourdeau et al., 2011; Kaplan et al., 2013). Rates of engaging in sexual behavior were higher among older adolescents, and older youth were more likely than younger youth to believe there were more benefits than costs associated with sex. Regardless of the

specific measure of attitudes about sex, the association between attitudes and behaviors was found. That is, some studies examined the perceived costs and benefits associated with engaging in sex, others assessed perceived emotional outcomes, and still others looked at both beliefs about sex and intent to engage in sex. It would be reasonable to conclude, therefore, that attitudes about sex influence intent to engage in sex, as well influencing engagement in sexual behavior. Thus, we need to further understand what predicts adolescents' attitudes about risky sexual behavior to better inform prevention and intervention programming aimed at reducing adolescent engagement in risky sexual behavior.

Parent and Peer Support and Adolescents' Risky Relationship Behaviors and Attitudes

Parents matter for many domains of adolescents' lives. One aspect of the parent-child relationship that has been shown to be especially important is parental support. Parental support is likely a foundational aspect of the parent-child relationship from which other positive qualities stem (e.g., parental knowledge, open communication; De Graaf et al., 2010; Madkour, Farhat, Halpern, Gabhainn, & Godeau, 2012). That is, parents who support their youth are likely communicating more with them, and are therefore more knowledgeable about the activities in which their adolescents are engaging. Previous studies have defined parental support as adolescents' perceptions of how much their parents care about them, help them with problems, and listen to them.

In addition to parents, peers, especially close friends, play an important role in the lives of adolescents, particularly as youth begin to gain more freedom from their parents in making decisions and increase time spent without parental supervision. Peers have been shown to influence a range of adolescent behaviors including decisions to engage in substance use, cigarette use, and sexual intercourse (Dunn et al., 2011). Not only do friends influence negative

behaviors, evidence also indicates that peers influence other aspects of adolescent development such as attitudes about risky sexual behavior and dating violence (e.g., Elkington, Bauermeister, & Zimmerman, 2011; Richards & Branch, 2012). It is anticipated that support from parents and close friends collectively influence adolescents' risky sexual behavior and dating violence attitudes, with more support being associated with more disapproving attitudes.

Parent support and risky relationship behaviors/attitudes. Research suggests that parental support is associated with delayed initiation of sex, condom use (De Graaf et al., 2010; Parkes et al., 2011), and lower rates of involvement in a violent dating relationship (Pflieger & Vazsonyi, 2006). A number of studies were identified that examined the association between parental support and risky relationship behaviors. Most of the research has examined associations between parental support and adolescents' engagement in risky sexual behavior, with a few studies examining relationship violence or including a measure of adolescent attitudes about risky or problem behaviors.

In a review of the literature on adolescent sexual behavior, Kirby (2002) examined antecedents of adolescent engagement in sex, contraceptive use, and pregnancy. Based on his review of 250 studies, parents were found to have an important influence on adolescent sexual behavior. The reviewed articles suggested that parental support was positively associated with contraceptive use, as well as serving as a protective factor in the initiation of sex (i.e., delayed sexual debut).

More recently, Parkes et al. (2011) examined the influence of parental support on adolescent risky sexual behavior. Parental support was measured using seven items assessing parental behaviors and interactions (e.g., my parents "encourage me to talk about my difficulties," "are loving"). Sexual risk included one question assessing engagement in

penetrative sex and a second question assessing lifetime condom use. The sample included 1,854 adolescents from Scotland who were an average age of 15.5 years. The sample was predominantly White (94%) with an equal number of males and females. Nearly one-third of the sample reported engaging in sexual intercourse (35% of females and 29% of males). Parental support was positively associated with delayed first intercourse and condom use, controlling for gender, age, family structure, and father's education.

De Graaf et al. (2010) examined the association of parental support with several sex-related outcomes (e.g., age at first sexual intercourse, contraceptive/condom use, number of sexual partners) among a sample of adolescents and young adults in the Netherlands. The sample included 2,633 individuals (52% females) whose ages ranged from 12 to 25 years, with the majority (89%) of participants between 17 and 24 years of age. Sexual behavior was assessed using participant reports of age at sexual debut, number of sexual intercourse partners, and contraceptive use. Items assessing parental affection and responsiveness (e.g., "my parent helps me well when I'm having a difficult time") were used to measure parental support. Results indicated that parental support was significantly correlated with several of the sex-related outcomes. Greater parental support was associated with older age at sexual debut, fewer sexual partners, and increased use of contraceptives/condoms. Gender played an important role in these associations as parental support was only significantly related to age at first sexual intercourse among females and condom use with most recent partner among males.

Using a sample drawn from a longitudinal study, Price and Hyde (2011) assessed whether several aspects of the mother-child relationship predicted early sexual debut. One predictor of interest was perceived maternal support, assessed using items such as "How often do you turn to this person for support with your personal problems?" Participants reported the frequency in

which they had engaged in sexual behavior (i.e., sexual intercourse or oral sex) with early sexual debut considered engaging in sex by 15 years of age. The sample included 268 adolescents between 14 and 16 years of age. There were slightly more females (53%) than males (47%), and participant ethnicities were European American (90%), African American (4%), Hispanic (2%), Asian American (2%), and Native American (2%). Sixteen percent of the sample reported engaging in early sexual behaviors. Findings showed that adolescents who engaged in first intercourse or oral sex by age 15 reported less maternal support than those who had not engaged in first sex by age 15. Findings also indicated that maternal support significantly predicted sexual debut, controlling for family structure, race, and SES. Thus, greater maternal support was associated with lower rates of engaging in early sexual behavior.

Several studies have used data from Add Health. In one study, the association between multiple parenting behaviors and adolescent risky sexual behavior was examined longitudinally among a sample of sexually active first and second generation Hispanic immigrant youth (Trejos-Castillo & Vazsonyi, 2009). The sample included 2,016 youth (51% female) between 12 and 16 years of age at wave one of data collection with two waves of data used for the study. One parenting behavior, maternal support (e.g., "How close do you feel to your mother?"), was examined as a predictor of adolescent risky sexual behavior. Risky sexual behavior was assessed using a composite of five items including whether birth control was used at last intercourse and age at sexual debut. Findings indicated that maternal support at time one significantly predicted adolescent risky sexual behavior at time two. That is, adolescents who reported greater maternal support also reported less engagement in risky sexual behavior one year later.

In another study using Add Health, Wolff and Crockett (2011) examined the effect of parental support on adolescent risky sexual behavior. The sample included 7,748 adolescents

(50% female) who were predominantly White (75%) and an average age of 15 years. Parental support was measured at time one using five items, for example "How much do you think your mother/father cares about you?" Risky sexual behavior was assessed at time one and time two (one year later) using participant reports of ever having engaged in sex and use of contraceptives at first and most recent sexual intercourse.

Differences were found in rates of engagement in risky sexual behaviors by age and race, such that older and White adolescents reported engaging in more risky sexual behaviors than younger and African American and Latino youth. The race differences are counterintuitive given that the literature indicates that African American and Hispanic/Latino youth typically engage in higher rates of risky sexual behavior (i.e., earlier initiation and higher rates of ever having sex) than White youth (e.g., Carvajal et al., 1999; CDC, 2011). In regards to maternal and paternal supports, findings indicated that both were negatively related to risky sexual behavior at time one, controlling for gender, age, and ethnicity. However, only maternal support significantly predicted less risky sexual behavior one year later, controlling for risk behavior at time one. That is, both maternal and paternal supports were important predictors of concurrent risky sexual behavior, whereas only maternal support was predictive of later engagement in risky sexual behavior.

In a study using a large sample of European youth, Madkour et al. (2012) assessed whether parental support was related to early sexual initiation among adolescent females. The sample included 7,466 females who were an average age of 15.6 years and most (74%) lived in a two-parent household. Parental support was assessed using four items (e.g., how often the parent "makes me feel better when I am upset"). Of those reporting having had sexual intercourse, 20% indicated early sexual initiation (age 15 or younger). Likelihood of engaging in early sexual

initiation varied by age and family structure, such that rates of early sexual initiation were higher among those who were older and those living in a stepfamily or with a single parent. Findings indicated that paternal and maternal supports were negatively associated with early sexual initiation, controlling for age, SES, and family structure. That is, those who reported greater perceived parental support also reported lower rates of early sexual initiation.

Only one study could be found that addressed parental support and adolescents' attitudes about sexual activity (Somers & Ali, 2011). The researchers assessed sexual attitudes and behaviors among a sample of 194 adolescent youth (54% female). The sample was comprised of African American and Mexican American youth of low socioeconomic status who were an average age of 13 years. Sexual self-efficacy measured whether adolescents believed that they could say no to a boyfriend/girlfriend if they wanted to have sex but the adolescent did not. One predictor used to examine adolescent sexual self-efficacy was parental support (e.g., "there are adults who care about me at home"). Results indicated that parental support was a significant predictor of sexual self-efficacy among adolescents. Interestingly, parental support was not significantly associated with sexual behaviors (e.g., frequency of unprotected sex). Thus, support from parents was related to adolescents having greater confidence in their ability to say no to engaging in sex but not directly associated with adolescent risky sexual behavior.

Overall, parent support is associated with less adolescent sexual risk-taking and greater confidence on the part of the adolescent that unwanted sexual activity can be refused. Fewer studies have examined how parental support matters for adolescent dating violence. The following studies examined the association between parental support and dating violence perpetration, victimization, and attitudes about dating violence. In one study, Banyard and Cross (2008) examined the protective role of parental support on dating violence victimization and

subsequent mental health and educational outcomes. Dating violence victimization was measured by asking adolescent participants how many times they had been hit, pushed, or beaten by a boyfriend or girlfriend. Support was measured using three items (e.g., my parent is "there when I need her/him") for maternal support and the same three items for paternal support. The sample included 2,101 participants (51% female) in grades 7 through 12. Nearly one-fifth (17%) of participants reported experiencing physical dating violence victimization. Findings indicated that parental support was negatively associated with dating violence victimization.

Similar results were found in a study of at-risk African American girls (Salazar, Wingood, DiClemente, Lang, & Harrington, 2004). The sample included 522 girls who were an average age of 16 years and recruited from health clinics and health classes in low-income neighborhoods. Parental support was measured using four items from the Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988). Three types of dating violence victimization were assessed (i.e., emotional, verbal, physical). A sample item was "Has a boyfriend ever verbally abused you? That is swore at you, cursed at you, or called you insulting names?" Findings indicated that 16% of participants reported emotional, 18% reported physical, and 23% reported verbal dating violence victimization. Greater perceived support from family was associated with lower rates of all three types of victimization.

In one study examining the association between parental support and dating violence perpetration, gender differences were found. Using waves one and three of Add Health, Herrera, Wiersma, and Cleveland (2008) examined perceived parental support at age 15 and dating violence perpetration at age 22. The sample included 1,275 couples (54% female) and was predominantly White (69%). Parental support was measured among the primary participants (those who were participants in Add Health but not their romantic partner) using ten items

assessing perceived closeness, warmth, and care provided by parents. The primary participant and their partner reported on dating violence perpetration in wave three. Findings indicated that parental support predicted lower rates of dating violence perpetration among females but not males. Therefore, parental support was protective against female perpetration but not male perpetration.

Only one study focusing on the influence of parental support on adolescent dating violence behavior also examined attitudes about dating violence (Pflieger & Vazsonyi, 2006). The sample included 809 adolescents (50% female) of African American (22%) and Caucasian (78%) race/ethnicity. Participants were an average age of 16 years and most were from two-parent households (65%). One measure of parenting, maternal support, was assessed using four items (e.g., "sometimes my mother won't listen to me or my opinions;" items were reverse coded with higher scores indicating greater maternal support). Dating violence victimization and perpetration were each measured with one question asking how often a range of physical incidents (e.g., pushed, slapped) occurred with a dating partner. Dating violence attitudes were assessed using eight items (e.g., "it is ok for a boy to hit his girlfriend if she did something to make him mad") with higher scores indicating more acceptance.

Results indicated significant negative correlations of maternal support with dating violence perpetration, victimization, and dating violence acceptance. Additionally, using hierarchical regression analyses, the researchers found that maternal support was a predictor of dating violence attitudes and dating violence victimization, controlling for age, sex, race, and family structure. The association between support and attitudes was only found among participants in the low socioeconomic status (SES) group. That is, for those reporting low SES, high maternal support was associated with less accepting attitudes toward dating violence. In

addition, a negative association was found between maternal support and dating violence victimization among those in the high SES group. Ultimately, maternal support served as a protective factor across groups through its influence on different aspects of dating violence.

Summary

Taken together, these studies addressing risky sexual behavior and dating violence show that parental support matters. Overall, parental support is a protective factor against early sexual debut and sex without a condom. However, gender differences were found in the associations between parental support and sexual behavior. For example, one study found that parental support was associated with later sexual debut among females but not males, whereas parental support was associated with greater condom use among males but not females. There is limited literature on the relationship between parental support and adolescent involvement in a violent dating relationship. The studies reviewed indicated that parental support was associated with lower rates of dating violence victimization across gender and lower rates of dating violence perpetration among females. Furthermore, less research has focused on the role of parent support on adolescents' attitudes about risky relationship behaviors. Only two studies were identified that examined the relationship between parental support and attitudes. Importantly, these studies found that parental support was associated with positive outcomes (i.e., less accepting attitudes about dating violence, greater confidence in the ability to say 'no' to engaging in sex). Across the reviewed studies, correlations of .08 to .25 between parental support and risky relationship behaviors were found. Although these associations were weak to modest, parental support does have some influence on adolescent risky relationship behaviors. It might be that parental support more strongly influences adolescents' attitudes about engaging in risky relationship behaviors in addition to directly influencing behavior.

In addition to the empirical support, there is theoretical justification for this association. As supported by attachment theory, having a supportive, secure relationship with one's parents provides youth with people on whom to rely in challenging situations by providing guidance and emotional support (Allen & Land, 1999). Thus, knowing that parents care and feeling comfortable sharing with parents is important for healthy adolescent youth and young adult development. It seems that the more support an adolescent feels they have from their parents, the more information they report their parents having about their lives, and the more influential parents are on adolescents' attitudes. When examining influences on adolescents' attitudes and behaviors, peers also must be considered given their prominence in adolescents' lives. In particular, peers matter for areas in adolescents' lives, such as sexual and dating beliefs and behaviors, areas about which adolescents may not fully share the details with their parents.

Friend support and risky relationship behaviors/attitudes. Few studies have addressed the role of close friend support on risky relationship behaviors. Four studies were found that examined the influence of support from friends in general, with only one study exclusively looking at the role of close friend support. Studies typically focus on the influence of peers and peer groups more broadly. In fact, much of the literature has focused on the negative influence of peers with less research on the positive contribution peers and close friends can have in adolescents' lives. For example, studies examining adolescents' risky sexual behaviors have focused primarily on negative peer influences, with fewer studies addressing the positive influence of peers, such as peer support on adolescents' risky relationship behaviors. One study focusing on the negative influence of peers addressed the role of friends' sexual attitudes and behaviors on adolescent girls' number of sexual partners (Lyons, Giordano, Manning, & Longmore, 2011). Friends' attitudes toward sex were assessed using three items (e.g., "my

friends think it's okay to have sex with someone you are not actually dating") with higher scores indicating more liberal sex attitudes. Friends' sexual behavior was measured with one question assessing adolescents' perceptions of their friends' engagement in sex (i.e., "How many of your friends do you think have had sex?"). A sample of 600 adolescent girls was drawn from a larger study to examine the association between friends' sexual attitudes and behavior and adolescents' own sexual behavior. Participants were an average age of 15 years, primarily White (65%), and from two-parent households (49%).

Adolescent girls reported an average of slightly less than one lifetime sexual partner (range 0-36). Findings indicated that friends' sex attitudes and own sexual behavior were associated with adolescent girls' number of sexual partners. That is, adolescent girls reported a greater number of sexual partners when having friends with more liberal attitudes about sex and when perceiving they had more sexually active friends.

Also showing the negative impact peers can have on adolescent engagement in risky sexual behaviors, Doljanac and Zimmerman (1998) examined several individual and relational predictors of high-risk sexual behavior and condom use. High-risk sexual behavior was measured by creating a composite from responses to four items (i.e., ever having sex, age at first sexual experience, number of sexual experiences, number of lifetime partners). Condom use was measured by whether participants reported using a condom at first sexual intercourse and how often they had used condoms during sexual intercourse. A predictor of interest, peer influence, included measures of peer problem behaviors such as aggressive behavior and substance use. The sample included 850 adolescents who were an average age of 14.5 years. All participants had a grade point average of 3.0 or below. The sample was predominately African American (80%) with equal numbers of males and females.

The majority of African American participants reported ever having engaged in sex (73% of males and 55% of females). Slightly less than half of White participants reported ever having engaged in sex (43% of males and 40% of females). African American and White males reported similar rates of not using a condom at first sex (37% and 38%), whereas African American females reported lower rates of not using a condom at first sex (18%) when compared to White females (23%). Findings indicated that adolescents engaged in more high-risk sexual behavior when they had peers who engaged in delinquent and problem behaviors. Among White adolescents, having peers who did not engage in problems behaviors was associated with greater reported condom use. Thus, peers' behavior, when positive, could serve as a protective factor for adolescent engagement in risky sexual behavior.

Among the studies focusing on the positive influence of peers on adolescent sexual behavior, Elkington et al. (2011) examined the influence of parent and friend support on consistency of adolescent condom use. Associations of support with condom use were examined in a sample of 679 African American youth (51% female) who were part of a larger, longitudinal study. Participants were an average age of 15 years at time one with four data collection points used in the study, each separated by one year. Parental support was measured using five items, including "my parents are good at helping me solve problems." Support from friends was also measured using five items similar to those used for parental support (e.g., "I rely on my friends for emotional support"). Findings indicated that parent and friend support was significantly associated with condom use over time. That is, adolescents who reported greater support from parents and friends also reported greater consistency in condom use.

Kalina et al. (2011) also focused on adolescent sexual outcomes in their examination of the influence of several psychological and relational factors on sexual behavior among a sample

of 2,318 adolescents ages 13 to 16 (51% female) from the Slovak Republic. Two relational factors of interest were support from family and support from friends, which were measured using the revised 12-item Perceived Social Support Scale (Blumenthal et al., 1987). Sexual behavior was measured by assessing whether adolescents had ever engaged in sexual intercourse, the length of the relationship before first intercourse, whether they had sex while under the influence of alcohol, number of sexual partners, and condom use at last intercourse. Adolescents who engaged in first sex while in a relationship less than one month, had sex after alcohol use, had more than 3 sexual partners, and did not use a condom at last intercourse were considered to have engaged in risky, or unsafe, sex.

Findings indicated that support from family was significantly associated with adolescent sexual behavior, such that higher levels of support were associated with greater likelihood of not having engaged in sex. Surprisingly, support from friends was associated with greater likelihood of engaging in risky sexual behavior. Thus, family support appeared to be an important influence on adolescents abstaining from sex, whereas friend support was an important influence on adolescents engaging in unsafe sex.

Also focusing on support and sexual behavior, Ramiro et al. (2013) examined rates of perceived support from family and friends by adolescent sexual experience. Furthermore, the researchers were interested in the influence of support on adolescent sexual risk. The sample included 1,005 adolescents (53% female; average age was 16 years) from Spain. Participants reported whether they had ever engaged in non-coital or coital sex, as well as on their sexual experiences over the past two months and with their most recent partner (e.g., number of sexual partners, frequency of non-coital or coital sex, condom use). Support was measured using four

items assessing family support (e.g., “my family really tries to help me”) and four items assessing friend support (e.g., “I can talk about my problems with my friends”).

In terms of sexual experience, 16% of participants reported never having engaged in sexual behavior, 50% reported engaging in non-coital sexual behavior, and 34% reported having engaged in sexual intercourse. Based on mean differences, adolescents with no sexual experience reported higher levels of family support and lower levels of friend support than those with any sexual experience. In addition, using linear regression analyses, family support was significantly negatively associated with vaginal and anal sexual risk among males, but family support was not significantly associated with any female sexual risk behavior. Friend support was significantly negatively associated with anal and oral sexual risk among females; however, friend support was not significantly associated with any male sexual risk behavior. Thus, support served as an important protective factor in adolescent risky sexual behavior, but differences by gender were found in the type of support that was most influential.

Only one study focused exclusively on the influence of close friend support on adolescent risky relationship behavior (Brady, Dolcini, Harper, & Pollack, 2009). The sample included 202 predominantly African American (88%) inner-city youth (55% male) who were an average age of 17 years at baseline and residing in a community with high rates of sexually transmitted infections. Follow-up data were collected from 163 of the original participants one year later. Close friend support was measured using six items (e.g., “I tell my close friends everything”), and risky sexual behavior was measured by participant reports of condom use over the past year. A significant association between close friend support and condom use was found, such that adolescents who reported greater close friend support also reported more inconsistent condom use one year later. Because this was an at-risk sample with higher rates of engaging in risky

sexual behavior (e.g., 21% of participants reported having at least three partners in the past year), it might be that adolescents are more likely to discuss their involvement in risky relationship behaviors with close friends and, therefore, receive support from their friends and possibly come to believe that participation in such behaviors is acceptable.

In addition to influencing adolescent risky sexual behavior, peers also play a role in adolescent involvement in dating violence. As with peer influences on adolescent sexual risk-taking, many studies focus on the negative influence of peers on adolescents' experiences of dating violence. For example, Ellis, Chung-Hall, and Dumas (2013) examined the impact of peers' aggression on adolescent dating violence perpetration and victimization. The sample included 589 adolescents (59% female) who were predominantly White (80%) and an average age of 15.5 years. Physical and relational aggression were measured using six items (e.g., "when someone makes me really angry, I push or shove the person") and eight items (e.g., "I have spread rumors about a person just to be mean"), respectively. Dating violence victimization and perpetration were measured separately using the Conflict in Adolescent Dating Relationships Inventory (Wolfe et al., 2001). This measure assessed threatening behaviors, as well as physical, sexual, and relational aggression (e.g., "I insulted him/her with put-downs;" frequency of occurrence was reported).

Rates of perpetration ranged from 21% (physical) to 63% (relational) and 83% (emotional), with similar rates of victimization (21%, 58%, and 84%). Findings indicated that peer group relational aggression, but not peer group physical aggression, predicted adolescent dating violence perpetration and victimization six months later. Thus, adolescents who spent time with peers who exhibited higher levels of relational aggression were more likely to become involved in a violent dating relationship.

In a second study focusing on the negative influence of peers, Arriaga and Foshee (2004) examined peer influence on adolescent involvement in a violent dating relationship. The sample included 526 adolescents from rural North Carolina who reported ever having been in a romantic relationship. The median age of participants was 13 years and 53% were female (83% Caucasian). The study was longitudinal with six months separating time one and time two data collection. Dating violence perpetration was measured using a scale similar to the Conflict Tactics Scale (Straus, 1990). Friend dating violence was measured using four items (e.g., "How many of your female friends have told you that their boyfriends were violent to them?").

Dating violence perpetration was reported by 20% of participants. Thirty-one percent of participants had at least one friend in a violent relationship. Friend involvement in a violent relationship as a perpetrator or victim at time one predicted adolescents' own perpetration six months later, controlling for adolescents' own dating violence perpetration at time one. In addition, friend dating violence at time one predicted victimization only among female adolescents at time two. Therefore, both peer behaviors and beliefs have been shown to negatively influence adolescents' own behaviors and beliefs.

Although few studies have examined the positive influence of peers on adolescent dating violence, one recent study demonstrated the prosocial influence of peers on dating violence perpetration (Foshee et al., 2013). The study was conducted using five waves of data with six-months separating each data collection. The sample included 3,412 participants with approximately equal numbers of males and females who were an average age of 14 years at wave one. The racial/ethnic composition of the sample was 50% African American, 40% Caucasian, and 10% other. Several peer influences were assessed including friends' own perpetration of dating violence and friends' prosocial beliefs. Peer nominations were used so that friends' self-

reports, instead of adolescents' perceptions, were included in the study. Friends' dating violence perpetration was assessed using one item in which participants reported how many times in the past three months they had hit someone they were dating. Friends' prosocial beliefs were measured by friends' reports of agreement with statements such as "it is good to be honest" and "people should not cheat on tests." Number of prosocial friends nominated by the participant was used for analyses. Finally, adolescents' own dating violence perpetration was measured using participant reports of whether they had engaged in a range of behaviors while with a dating partner over the past three months (e.g., "During the past 3 months, how many times did you do each of the following things to someone you were dating or on a date with? Don't count if you did it in self-defense or play…grabbed, slapped, pushed").

Dating violence perpetration over the past three months was reported by 14% of participants in the sample. The researchers controlled for a number of factors in their analyses including sex, race/ethnicity, parent education, family structure, and dating status. Findings indicated that adolescents reported higher levels of dating violence perpetration when they had a greater number of friends who reported perpetrating dating violence. Additionally, girls who had more prosocial friends reported lower levels of dating violence perpetration.

Finally, Richards and Branch (2012) focused specifically on the positive influence of peers in their assessment of the influence of family and friend support on adolescent dating violence perpetration and victimization. The sample of 970 youth (51% female) was drawn from wave one of the Toledo Adolescent Relationship Study. Participants were an average age of 15.5 years and comprised a diverse sample (64% White, 23% African American, 11% Hispanic, and 1% other). Perpetration of physical dating violence was reported by 23% of the sample and victimization by 21% of the sample. Most of the reported experiences of violence were mutual,

meaning that the majority of adolescents reporting perpetration also reported victimization. Findings indicated that greater support from friends was significantly related to lower levels of both dating violence perpetration and victimization among females. Contrary to expectations, support from parents was not significantly associated with dating violence perpetration or victimization for either gender.

Summary

In summary, the studies examining peer influences on adolescent risky sexual behavior and dating violence indicate that peers are important influences in the lives of adolescents. Although much of the literature focuses on how peers' own behavior and attitudes influence adolescents' behavior and attitudes, there is some evidence to suggest that peer support also plays a role in these behaviors and attitudes. Based on the limited literature, the role of friend support has been mixed. Some findings indicated that friend support is related to increased engagement in risky relationship behaviors, while other findings show that friend support is related to less engagement in risky relationship behaviors among females. Studies addressing gender differences in the association between support and risky relationship behaviors have found that peers have a greater influence on adolescent females' engagement in risky relationship behaviors, but parents appear to be more influential on males' behaviors. Thus, it seems possible that friend support might serve as a protective factor against adolescent engagement in negative, or risky, relationship behaviors, particularly among specific populations. Therefore, there is a need to better understand the role of friend support on adolescents' attitudes about risky relationship behaviors.

In many of the reviewed studies, the role of peers was assessed by examining the number of friends who provided support or engaged in a particular behavior (e.g., "How many of your

female friends have told you that their boyfriends were violent to them?") or overall support received from peers (e.g., "I rely on my friends for emotional support"). In attempt to make our examination of support from parents and peers comparable, we assessed support received from a best friend instead of the peer group more generally. Measures of peer support typically assess this concept broadly, and it often is unclear how peers are defined. Therefore, adolescents might be responding to items while considering a close friend, small social group, friends and acquaintances, or the classroom/school environment. By asking specifically about a best friend, we are able to place parameters around the measure, thus allowing for more consistent and specific assessment of peer support. In addition, literature shows that although parents remain important, best friends become prominent sources of support in early adolescence (Markiewicz et al., 2006) and influence adolescent engagement in sexual behavior (Prinstein, Meade, & Cohen, 2003) and feelings of depression and social anxiety (La Greca & Harrison, 2005). Therefore, the influence of best friend support on adolescents' attitudes about risky relationship behaviors warrants examination.

Parent and Friend Control/Possessiveness and Adolescents' Risky Relationship Behaviors

Substantial literature points to the positive role of support from parents and friends on adolescent outcomes. However, not all relationships with parents and best friends are supportive; some adolescents' relationships include controlling behavior. Therefore, in addition to examining the positive role of parents and friends, the negative (or "darker") side of these relationships also is assessed. This "darker side" includes experiences of psychological control, jealousy, and possessiveness. Conceptually, relationships characterized by control are expected to lead to adolescents' holding expectations of similar behaviors in other, future relationships. Youth learn how to respond to others from past experiences and use these past experiences to

inform their beliefs about future relational interactions. Empirically, psychologically controlling parental behavior has been associated with greater dating violence perpetration, greater likelihood of engaging in high-risk sexual behaviors, and lower self-esteem (Bean et al., 2003; Boudreault-Bouchard et al., 2013; Leadbeater et al., 2008; Rodgers, 1999). Within friendships, controlling behavior (i.e., possessiveness) has been associated with lower self-esteem and higher rates of aggression (Kouwenberg et al., 2013). It is expected that parental psychological control and best friend possessiveness influence adolescents' beliefs about engaging in risky relationship behaviors, with more control associated with more accepting attitudes.

Parental psychological control and risky relationship behaviors/attitudes. Greater parental psychological control has consistently been associated with higher rates of adolescent aggression. For example, Loukas, Paulos, and Robinson (2005) examined the role of maternal psychological control on early adolescent engagement in aggressive behaviors. The sample included 745 adolescents (10-14 years) who reported on the frequency in which they had engaged in overt aggressive behaviors (i.e., hitting, yelling, starting fights), as well as their mother's psychologically controlling behaviors (8 items; e.g., "My mother will avoid looking at me when I have disappointed her"). Maternal psychological control significantly predicted early adolescent girls' and boys' overt aggressive behaviors. That is, adolescents who reported having more psychologically controlling mothers also reported engaging in more physical and verbal aggression. In addition, there was a slightly stronger association between maternal psychological control and overt aggression among older girls when compared to younger girls.

Another study focused on the influence of parental psychological control on older adolescents' use of relational aggression in their friendships (Soenens, Vansteenkiste, Goossens, Duriez, & Niemiec, 2008). The researchers assessed parental psychological control using

adolescents' self-report of mothers' and fathers' behavior (e.g., "My mother/father is less friendly to me if I don't see things like he/she does"), as well as parents' reports of their own behaviors (e.g., "I tend to be less friendly to my son/daughter if he/she does not see things like I do") among a sample of 284 adolescents (17 years; 51% female) from Belgium. Peer nominations and adolescent-report were used to measure relational aggression (e.g., "When angry, gives others the 'silent treatment'"). Using SEM, parental psychological control was found to positively predict adolescent relational aggression. That is, greater adolescent- and parent-reported parental psychological control was associated with more relational aggression within adolescent friendships.

While the first two studies examined aggression in general, one study looked at aggression within the context of a dating relationship. Using a sample of 664 adolescents (15.5 years) who were predominately European-Canadian (85%), Leadbeater et al. (2008) examined parental psychological control as a predictor of adolescents' involvement in an aggressive dating relationship. Maternal psychological control was measured with 8 items (e.g., "My mother is a person who changes the subject whenever I have something to say") and relational dating aggression with 5 items assessing manipulation tactics used within the dating relationship such as ignoring and threats to terminate the relationship. Findings indicated that mothers' psychological control was associated with greater relational dating aggression.

There appears to be a clear positive association between parental psychological control and adolescents' aggressive behavior; however, less literature has examined the role of parental psychological control on adolescent engagement in risky sexual behavior. Rodgers (1999), in one of the few studies looking at this association, found that, among a sample of 375 sexually active high school students (51% female; 93% White), parental psychological control mattered

for females' engagement in risky sexual behavior but not males'. Further analysis revealed that it was when females reported having a father who was psychologically controlling that they were also more likely to report greater sexual risk-taking.

Using a more ethnically diverse sample, Upchurch, Aneshensel, Sucoff, and Levy-Storms (1999) examined the effect of parental overcontrol on adolescent sexual initiation. The sample included 870 youth (53% male) from the Los Angeles area that were between 12 and 17 years of age. Parental overcontrol was measured using 5 items (e.g., "My parents have too many rules for me"). Findings indicated that parental overcontrol was associated with earlier sexual debut across gender controlling for race/ethnicity and family structure.

Summary

Overall, the literature consistently points to a positive association between parental psychological control and adolescent aggression. Importantly, one study found parental psychological control to be related to higher rates of relational aggression within dating relationships. Two studies were found that examined the association between parental psychological control and risky sexual behavior. In one study, parental psychological control was associated with earlier sexual initiation across gender, but in the second study, parental psychological control was related to higher rates of sexual risk-taking among females only. No studies were found that specifically assessed the outcome of beliefs or attitudes; however, it is anticipated that parental psychological control will operate similarly in associations with attitudes, as attitudes and behaviors have been consistently linked.

Friend possessiveness and risky relationship behaviors/attitudes. Similar to parental psychological control, friend possessiveness, or jealousy, has been positively associated with the use of aggressive behavior. For example, Parker et al. (2005) examined friendship jealousy

among a sample of 399 fifth through ninth grade students (53% male). Peer nominations were used to assess friend and peer jealousy (e.g., "Students who get really jealous if you try to be friends with their friend"), passive and social aggression (e.g., "Students who tell their friends they will stop liking them unless the friends do what they say;" "Students who, when they are mad at a person, get even by keeping that person out of their group of friends"), and victimization by others (e.g., "Students who get made fun of my other students"). Participants were provided lists of other students' names and asked to select those who engaged in various behaviors. Significant associations were found between peer-reported jealousy and aggression and between friend-reported jealousy and victimization. That is, youth viewed as jealous by their peers were also viewed as more aggressive, but those viewed as jealous by their friends were seen as being victimized more often.

In a more recent study conducted in the Netherlands, the researchers found that negative friendship features (e.g., jealousy, dominance) influenced adolescents' aggressive behaviors (Kouwenberg et al., 2013). A sample of 548 youth (55% female; 11 years) reported on the positive and negative aspects of their friendship with their best friend (e.g., "I am jealous towards my friend;" "My friend tries to boss me around"). Participants also responded to items assessing their own aggressive behavior (e.g., "kicking"). Friendships characterized by negative qualities, such as jealousy and dominance, were associated with greater adolescent-reported aggression.

In another study, a small, diverse sample of middle school students (58% male; 43% White, 23% Black, 23% Hispanic/Latino) was used to examine the association between friendship jealousy and relational and physical aggression (Culotta & Goldstein, 2008). Friendship jealousy was assessed using 15 hypothetical situations involving a best friend and another person. Relational aggression was measured using 15 items (e.g., "Keep other kids out

of your group of friends") and physical aggression with 7 items (e.g., "Hit others"). Findings indicated that jealousy was a significant predictor of relational aggression but not physical aggression, controlling for gender and race/ethnicity. That is, adolescents who reported greater friendship jealousy also reported engaging in higher rates of relational aggression.

Summary

The reviewed literature indicates that youth with friendships characterized by jealousy and control are more likely to engage in aggressive behavior. No studies were found that specifically looked at the influence of jealous or possessive friends on adolescents' own aggressive or sexual behavior, or their beliefs about these behaviors. These findings suggest that adolescents who have friends that exhibit jealous and possessive behaviors also are more likely to have friends who exhibit aggressive behavior. Therefore, friendships that include jealous and possessive qualities would likely influence adolescents' beliefs about the use of such behaviors in other relationships such as romantic partnerships. Thus, there is some limited empirical justification for examining the influence of friend possessiveness on adolescents' beliefs about risky relationship behaviors.

Just as parental psychological control was considered to be one counter measure to support, friend possessiveness could be viewed similarly in friendships. Given the association of friend support with lower rates of engagement in risky sexual behavior and dating violence and less accepting attitudes about engaging in risky relationship behaviors, it seems probable that friend possessiveness, or control, would have an opposing influence on adolescents' risky relationship behaviors and beliefs. In addition, as support from friends has been associated with expectations of supportive future relational interactions, possessiveness would be thought to be associated with expectations of control, jealousy, and possessiveness in future relational

interactions. Therefore, the limited empirical findings combined with theory suggest that the effect of friend possessiveness on adolescent risky relationship beliefs warrants further examination.

Self-esteem and Adolescents' Risky Relationship Behaviors and Attitudes

In addition to support and control in relationships, how an adolescent feels about himself or herself matters for how the adolescent treats others and expects to be treated by others. Self-esteem has been associated with positive and negative adolescent outcomes. High self-esteem has been shown to protect against depression and engagement in problem behaviors (Moksnes et al., 2010; Siyez, 2008), whereas low self-esteem serves as a risk factor for depression, substance use, and risky sexual and dating violence behaviors (Ethier et al., 2006; Jones & Gardner, 2002). Self-esteem refers to an individual's evaluation of oneself including perceived value and worth. An individual's feelings of worthiness can be influenced by experiences of success and failure, feelings of rejection and acceptance, and especially by how their parents treat them (Emler, 2001). Literature supports the positive association between parental support and higher adolescent self-esteem (Parker & Benson, 2004; Weber et al., 2010), and the negative association between parental psychological control and self-esteem (Linver & Silverberg, 1995; Plunkett, Henry, Robinson, Behnke, & Falcon, 2007). In addition to parental influences, support and possessiveness from peers also is associated with self-esteem among adolescents (Colarossi & Eccles, 2003; Kouwenberg et al., 2013). In this study, we aim to examine whether self-esteem might mediate the associations between parent and close friend support/control and adolescents' attitudes about risky dating behaviors. Some literature supports this association, finding partial and indirect mediation of the relationship between parent support and risky relationship behaviors and beliefs (Kerpelman et al., 2013; Pflieger & Vazsonyi, 2006; Slicker, Patton, &

Fuller, 2004). In this review, we will first examine self-esteem as a predictor of risky relationship behaviors and attitudes, then address associations among self-esteem, support/control, and risky relationship behaviors and attitudes, and conclude with describing three studies that address self-esteem as a mediator.

Self-esteem and risky relationship behaviors/attitudes. Several studies examined the role of self-esteem on adolescents' risky relationship behaviors and attitudes. In one study, Ethier et al. (2006) addressed the effect of self-esteem on adolescents' engagement in risky sexual behavior. Self-esteem was measured using the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965). Risky sexual behavior included having unprotected sex and number of partners over the past six months. The sample included 155 adolescent females who provided data at baseline and six month follow-up. Participants were an average age of 17 years, from a high-risk community (i.e., high rates of HIV and STDs), and all reported having engaged in sex. The racial/ethnic composition of the sample was mostly African American (46%) and Latina (37%). Findings indicated that adolescent females who reported lower self-esteem at baseline were more likely to have engaged in unprotected sexual intercourse six months later, but self-esteem did not significantly predict having multiple partners in the past six months.

In another study, Spencer, Zimet, Aalsma, and Orr (2002) examined the role of self-esteem on early adolescent initiation of sexual intercourse. The sample included 188 adolescents (57% female) who were an average age of 12.5 years at time one. The sample included White (84%) and Black (16%) participants who were all virgins at time one. Time one data were collected during seventh grade and time two data were collected approximately two years later. Self-esteem was assessed using the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965). Initiation of sexual intercourse was determined by participant responses to the statement "I have

had sexual intercourse/gone all the way." Findings indicated gender differences in the association between self-esteem and sexual debut. That is, males with higher self-esteem at time one were more likely than males with lower self-esteem to have engaged in first sex two years later, whereas females with lower self-esteem at time one were more likely than females with higher self-esteem to have engaged in first sex two years later. These results are consistent with more recent findings, particularly among females. For example, in a sample of 273 adolescents (53% female; 90% European American), Price and Hyde (2009) found that low self-esteem was associated with earlier initiation of sexual activity (i.e., by 15 years of age) among girls. However, this association was not found among boys.

The association between self-esteem and risky sexual behavior is less clear for males. In line with the findings of Spencer et al. (2002), another study examined self-esteem and sexual debut among a sample of 7,965 adolescents (52% female) from Add Health (Longmore, Manning, Giordano, & Rudolph, 2004). Participants were an average age of 15 years at time one with follow-up data collected one year later. Findings indicated that higher self-esteem was associated with sexual debut one year later only among older adolescent males. No association between self-esteem and sexual debut was found among males less than 17 years of age. These findings combined with others suggest that gender and age may influence associations among self-esteem and adolescent risky sexual behavior. Although self-esteem does influence adolescent behavior, findings differ based on gender such that lower self-esteem is associated with more risky relationship behavior among females, whereas the role of self-esteem on risky sexual behavior is mixed among males.

One study focused specifically on the role of self-esteem on adolescents' attitudes about sex (Chapman & Werner-Wilson, 2008). Attitudes were assessed in terms of the degree to which

adolescents were comfortable thinking and talking about sex, and the degree to which they disagreed with statements such as "sex is dirty and shouldn't be talked about." Self-esteem was measured using the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965). The sample included 304 youth from a mid-western state in the United States who were 10 to 18 years of age. The sample was predominantly Caucasian (82%) and there were slightly more females (56%) than males (44%). Just over half of the sample (58%) resided with both biological parents.

Using multiple regression analyses, the researchers found that self-esteem significantly predicted attitudes regarding sex. That is, adolescents who reported higher self-esteem also reported more comfort in thinking and talking about sex and held fewer negative attitudes about sex. In addition, adolescents who reported never having engaged in sex reported more negative attitudes about sex, whereas adolescents who had engaged in sex reported more positive attitudes.

Two studies examined the association between self-esteem and dating violence behavior. In the first study, Sharpe and Taylor (1999) examined self-esteem as a predictor of adolescent involvement in a violent dating relationship. The sample included 335 undergraduate students (67% female) from two universities in Canada. Self-esteem was measured using the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965). The Conflict Tactics Scale (Straus, 1979) was used to assess dating violence perpetration and victimization. Findings indicated that higher self-esteem was associated with lower rates of physical dating violence victimization and perpetration among females. Surprisingly, among males, high self-esteem was related to higher rates of physical and psychological dating violence victimization.

Using the same measures of self-esteem (i.e., Rosenberg Self-Esteem Scale) and aggressive behavior (i.e., Conflict Tactics Scale) in dating relationships, and a diverse sample of

122 high school students (81% female; 16.5 years of age), Jones and Gardner (2002) also found that lower self-esteem was significantly related to greater use of verbal aggression in dating relationships.

Associations among self-esteem and parent/peer support. Several studies have found significant associations among support and self-esteem. In a sample of 1,734 ninth through eleventh grade students (53% female; 84% from two-parent households) from Turkey (Siyez, 2008) associations among parent and peer support and adolescent self-esteem were found. Parent support was measured using eight items, and peer support was measured using two items. Self-esteem was measured using seven items assessing adolescents' ability to get along with others and to handle disappointment. Overall, females reported higher levels of perceived peer support than males, but no gender differences were found in perceived parental support or self-esteem. Hierarchical regression analyses showed that both parent and peer support positively predicted self-esteem.

In another study, Parker and Benson (2004) used a sample of 16,749 tenth grade youth from the National Educational Longitudinal Study to examine associations between parental support and self-esteem. Parental support was measured using six items evaluating parental fairness, understanding, and trust. Nine items were used to measure self-esteem. The sample was gender balanced and the race/ethnic composition was 70% White, 12% Hispanic, 10% Black, 7% Asian/Pacific Islander, and 1% Indian/Alaskan. Findings indicated that parental support was positively associated with self-esteem.

Weber et al. (2010) were interested in the associations among support and individual and mental health outcomes, including self-esteem. Support was measured using forty items from two subscales (family and friends) of the Perceived Social Support Scale (Procidano & Heller,

1983), and self-esteem was measured using the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 2005). The sample included 179 participants (52% female) who were an average age of 16 years and were predominantly White (86%). Mean differences were found in overall levels of self-esteem, with males reporting significantly higher self-esteem than females. Significant positive associations were found between family and friend support and adolescent self-esteem. Furthermore, the correlation between family support and self-esteem was slightly stronger than the correlation between friend support and self-esteem.

Salazar et al. (2004) found similar results, with parent support more strongly associated with higher self-esteem, among a sample of African American girls. The sample included 522 at-risk adolescent girls who were an average age of 16 years. Self-esteem was assessed using the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1979). Family and friend support were each measured using four items, and three types of dating violence victimization were assessed (i.e., emotional, verbal, physical). Findings showed that support from both family and friends was associated with higher self-esteem, with a stronger association between family support and self-esteem than peer support and self-esteem. In addition, higher self-esteem was associated with lower rates of dating violence victimization.

Finally, using two waves of data (separated by one year) from a larger, longitudinal study, Colarossi and Eccles (2003) examined the role of support on adolescent self-esteem. The study sample included 217 adolescents (58% female) from the Midwest who were an average age of 17 years. The majority of participants were White (92%) and residing in biological two-parent households (73%). Most parents had at least some college education (68%). Support was measured using six items assessing mother, father, and friend support independently (e.g., “In the last month, how often did your mother/father/friends help you with something that was important

to you?"). Self-esteem was measured using seven items, including "How often do you feel happy with the way you are?"

Overall, females reported higher levels of friend support than males did, whereas males reported higher levels of paternal support than females did. Similar levels of maternal support were reported across gender. Correlations among the variables indicated that maternal and friend support were positively related to self-esteem among females. In addition, paternal support was positively associated with self-esteem among males. Using structural equation modeling, findings indicated that only friend support predicted change in self-esteem from time one to time two across gender, controlling for self-esteem at time one. That is, greater friend support was associated with greater positive change in self-esteem one year later.

Associations among self-esteem and parent/friend control. The way youth are treated by their parents and friends matters for adolescents' individual development, particularly in their beliefs about their worth and how others, such as peers and dating partners, should treat them. Literature shows that having supportive parents and friends is associated with higher self-esteem, but that self-esteem is lower when youth have controlling parents or possessive friends (Bean et al., 2003; Kouwenberg et al., 2013; Plunkett et al., 2007). In one study, parental psychological control was examined as a predictor of self-esteem among a sample of 58 early adolescents (13-14 years; 79% Caucasian; 52% female; Linver & Silverberg, 1995). Self-esteem was measured using the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965), and psychological control assessed adolescents' perceptions of their mother's use of guilt induction and anxiety provoking as means of control (e.g., "feels hurt when I do not follow advice"). Parental psychological control was found to significantly predict adolescent self-esteem. In other words, youth with

mothers who used more psychologically controlling parenting strategies reported lower self-esteem.

In a more recent study, Bean et al. (2003) examined the association between parental psychological control and self-esteem among a sample of 155 (52% European American; 48% African American) high school students. Self-esteem was assessed using 8 items from the Rosenberg Self-Esteem Scale (Rosenberg, 1965). A sample item used to measure parental psychological control was "does not give me any peace until I do what he/she wants." Findings indicated that psychologically controlling mothers and fathers negatively influenced European American adolescents' self-esteem, whereas only fathers who were psychologically controlling negatively predicted African American adolescents' self-esteem. Despite this difference by race/ethnicity, overall, parental psychological control was associated with lower adolescent self-esteem.

Plunkett et al. (2007) found gender differences in the association between parental psychological control and self-esteem. The researchers measured self-esteem using the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1979) and parental psychological control using 14 items assessing parental guilt induction, love withdrawal, and punitive behavior. The sample included 161 adolescents (57% female; 80% Caucasian; 14.8 years) who resided with both biological parents. A negative association was found between parental psychological control and adolescent self-esteem. Furthermore, using SEM, findings indicated that parental psychological control was a significant predictor of lower self-esteem among females only.

Turning to control in peer relationships, one study was found examining the association between friendship jealousy and self-esteem. Using a sample of 548 youth (55% female; 11 years), Kouwenberg and colleagues (2013) assessed the influence of negative friendship

characteristics (i.e., jealousy, dominance) on adolescent self-esteem (e.g., "I believe I do things well"). Findings indicated that negative friendship qualities were related to lower adolescent self-esteem.

Overall, among the few studies found, greater parental psychological control was associated with lower self-esteem. One study found differences by gender, with parental psychological control influencing females' but not males' self-esteem. In the only study found examining the association between friend jealousy and self-esteem, friendship jealousy was negatively associated with self-esteem. Despite limited literature on friend possessiveness, it seems probable that controlling friend behavior would function similarly to parental psychological control in its association with self-esteem given that both behaviors include attempts at controlling the adolescent and pressuring the adolescent to develop a reliance on others. Furthermore, adolescents with controlling friends or parents learn that they are not worthy of being treated positively by others and, therefore, may feel incapable or unsure of themselves, therefore resulting in lower self-esteem

Self-esteem as a potential mediator of parent and peer support/control and adolescents' risky relationship behaviors/attitudes. A limited number of studies found that parental support was related to adolescent risky relationship behaviors and attitudes through adolescent self-esteem. In one study, the relationship between parental support and several individual and relational outcomes, including risky sexual behavior, were examined among a diverse sample of adolescents (Kerpelman et al., 2013). Risky sexual behaviors included age of sexual debut, number of partners, relationship length prior to sex, and seriousness of the relationship. Parental support was measured using five items, which assessed adolescents' ability to rely on their parents for help and advice. Self-esteem was measured using five items from the Rosenberg Self-

Esteem Scale (Rosenberg, 1965). The sample included 680 sexually experienced adolescents from a southern state who were an average age of 16.5 years. Approximately half of the sample was female (51%) and included European American (52%) and African American (48%) participants. Over half of the sample (63%) reported current involvement in a dating relationship. Findings indicated that parental support did not directly predict risky sexual behavior, but some indirect effects of parental support were found. Specifically, parental support predicted later sexual debut through adolescent self-esteem.

In another study, Pflieger and Vazsonyi (2006) examined self-esteem as a mediator of the relationship between maternal support and adolescent dating violence attitudes and behaviors. Maternal support was measured using four items (e.g., "sometimes my mother won't listen to me or my opinions;" items were reverse coded with higher scores indicating greater maternal support). Dating violence victimization and perpetration were each measured with one question asking how often a range of physical incidents (e.g., pushed, slapped) occurred with a dating partner. Dating violence attitudes were assessed using eight items (e.g., "it is ok for a boy to hit his girlfriend if she did something to make him mad") with higher scores indicating more acceptance. Self-esteem was measured using seven items from the Weinberger Adjustment Inventory (Weinberger, 1997) and included statements such as "I sometimes feel so bad about myself that I wish I were somebody else." Higher scores indicated lower self-esteem. These variables were examined among a sample of 809 African American (22%) and Caucasian (78%) adolescents. Participants were an average age of 16 years and most were from two-parent households (65%). There were equal numbers of males and females represented.

Maternal support was negatively associated with low self-esteem, rates of dating violence behaviors, and acceptance of dating violence. In addition, low self-esteem was positively

associated with dating violence behaviors and dating violence acceptance. That is, adolescents reporting low self-esteem also reported higher rates of dating violence behaviors and more accepting attitudes toward dating violence. The researchers were interested in the impact of SES and, therefore, divided the sample into low and high SES groups. Findings indicated that low self-esteem partially mediated the relationship between low maternal support and dating violence attitudes across SES, controlling for age, sex, race, and family structure. Among the low-SES group, low self-esteem also partially mediated the association between low maternal support and dating violence victimization.

Finally, Slicker et al. (2004) examined the relationship between parental responsiveness and early sexual initiation. The researchers were interested in whether self-esteem and substance use mediated this association. Early sex was defined as engaging in first sex before the age of 16. Parental responsiveness assessed the degree to which adolescents felt accepted and supported by their parents, and was measured using nine items similar to other measures assessing parental support (e.g., "I can count on my parents to help me out if I have some kind of problem"). Self-esteem was measured using the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965). The sample included 614 incoming freshmen at a middle-south university who were between 17 and 20 years of age. The sample included more females (68%) than males (32%) and was predominantly White (87%).

The researchers found that parental responsiveness was negatively related to early sexual initiation and positively related to self-esteem. In addition, self-esteem indirectly mediated the relationship between parental responsiveness and early sexual initiation through substance use. Thus, responsiveness (support) was an important influence on adolescents' self-esteem and

engagement in early sex. Although not directly related to early sex, self-esteem appeared to have some influence on adolescent risky relationship behaviors.

Summary

Taken together, the studies reviewed indicate that self-esteem is associated with adolescent risky relationship behaviors and attitudes about these behaviors, with the correlation between self-esteem and risky relationship behaviors ranging from .11 to .32 across the reviewed studies. Findings were mixed in terms of the effect of self-esteem, with notable differences by gender. For example, self-esteem was found to be protective for females' but not males' engagement in risky relationship behaviors. Given that self-esteem is related to adolescent behaviors and attitudes, further investigation of the strength and direction of the relationship is warranted. Furthermore, support from parents and friends was consistently positively associated with adolescent self-esteem, and parental psychological control and friend possessiveness negatively associated with self-esteem.

Several studies provided support for examining self-esteem as a potential mediator of the relationship between support and risky relationship behaviors and attitudes. Significant associations between support and adolescent attitudes about risky relationship behaviors (Pflieger & Vazsonyi, 2006; Somers & Ali, 2011), between support and self-esteem (Colarossi & Eccles, 2003; Parker and Benson, 2004; Siyez, 2008), and between self-esteem and risky relationship behaviors and attitudes (Chapman & Werner-Wilson, 2008; Ethier et al., 2006; Jones & Gardner, 2002) were found. Some studies also found self-esteem to partially or indirectly mediate associations between parental support and adolescent engagement in risky relationship behaviors (e.g., Kerpelman et al., 2013; Slicker et al., 2004). No studies examined self-esteem as a mediator of the association between peer support and risky relationship

behaviors and attitudes. However, there is some literature indicating that peer support, self-esteem, and risky relationship behaviors and attitudes are related. Therefore, it is reasonable to believe that self-esteem might also mediate the relationship between support from friends and beliefs about risky relationship behaviors.

Although no studies were found that examined self-esteem as a mediator of the association between parental psychological control or friend possessiveness and risky relationship attitudes, exploration of potential mediation is warranted. Literature indicates significant associations between parental psychological control/friend possessiveness and risky relationship behaviors (Culotta & Goldstein, 2008; Leadbeater et al., 2008; Loukas et al., 2005), between control/possessiveness and self-esteem (Bean et al., 2003; Kouwenberg et al., 2013; Plunkett et al., 2007), and between self-esteem and risky relationship behaviors and attitudes (Chapman & Werner-Wilson, 2008; Ethier et al., 2006; Jones & Gardner, 2002). Consequently, it is possible that control/possessiveness might influence adolescents' risky relationship beliefs both directly and indirectly through adolescent self-esteem. One limitation of the reviewed studies was that most focused specifically on adolescent engagement in risky relationship behaviors. However, given that the literature indicates a consistent association between attitudes and behaviors, it is important that we gain a better understanding of what predicts adolescents' attitudes about risky relationship behaviors. Therefore, the current study will examine self-esteem as a potential mechanism through which support and control influence adolescents' beliefs about dating aggression and risky sexual behavior.

General Summary and Research Questions

It is prior to and during early romantic relationship experiences that young adolescents form attitudes about healthy and unhealthy relationship behaviors. Although few studies

examined attitudes about risky relationship behaviors, substantial literature suggests a consistent modest to moderate association between attitudes about risky relationship behaviors and engaging in risky relationship behaviors (e.g., Bourdeau et al., 2011; Robinson et al., 2011; Sears et al., 2007). As adolescents have questions about romantic relationships, they often turn to parents and close friends for support and guidance. Often the support provided by parents and friends impacts both adolescents' behaviors and attitudes about engaging in certain relationship behaviors. There is extensive literature to substantiate the role of both parents and peers as sources of support, with stronger and clearer evidence for the role of parental support in areas such as later sexual debut (Price & Hyde, 2011), increased condom use (De Graaf et al., 2010; Wolff & Crocket, 2011), less likelihood of involvement in a violent dating relationship, and less accepting attitudes toward dating violence (Banyard & Cross, 2008; Pflieger & Vasonyi, 2006). Furthermore, these results were found across gender and race/ethnicity.

According to attachment theory, parents continue to be important sources of support throughout adolescence in their function as a secure base; however, friends take on a more prominent supportive role by providing adolescents with comfort and reassurance (Markiewicz et al., 2006). Much of the literature on the role of peers focuses on how the behaviors or attitudes of friends in general, or a peer group, influence, typically negative, adolescent behaviors. Less literature addresses the positive impact friends have on adolescents. Based on the studies reviewed, having supportive friends was associated with lower rates of involvement in a violent dating relationship (Richards & Branch, 2012) and less risky sexual behaviors (Elkington et al., 2011; Ramiro et al., 2013). Most of these positive results were found among females, with peers not significantly influencing males' engagement in risky relationship behaviors. Others show, however, that support from friends was associated with greater likelihood of engaging in risky

sexual behaviors across both genders (Brady et al., 2009; Kalina et al., 2011). The current study will examine whether support from parents and best friends matters for adolescents' attitudes about risky sexual and dating violence behaviors.

Not all adolescents have supportive parents or friends to whom they can turn, and some adolescents experience psychological control by parents or possessiveness by close friends. Adolescents with psychologically controlling parents experience dismissal of their thoughts and feelings when they do not align with their parents' beliefs. Psychologically controlling parents often use guilt and threats of the loss of love to maintain control of their child. Based on these past experiences, youth learn to expect the use of controlling behavior in future interactions including their interactions in romantic relationships. These expectations (or schemas) form the basis of adolescents' beliefs about how they should be treated (and how they should treat others) in relationships. Based on the reviewed studies, parental psychological control has consistently been linked with higher rates of aggressive behavior (Loukas et al., 2005; Soenens et al., 2008) and with increased sexual risk-taking among females (Rodgers, 1999). Less literature, however, has examined the role of friend possessiveness on adolescents' risky relationship behaviors and beliefs. Similar to parents, adolescents who have friends who are supportive (or controlling) would come to expect similar behaviors in future relationship interactions. In addition, friendships have some similarity to dating relationships; therefore, experiences within friendships would be thought to influence expectations in future dating relationships. Empirical findings on the role of friend possessiveness, although limited, indicate that friendship jealousy, or control is associated with higher rates of aggression (Culotta & Goldstein, 2008; Parker et al., 2005). The present study will assess whether parental psychological control or friend possessiveness influence adolescents' beliefs about risky relationship behaviors.

In addition to examining the influence of relational factors on adolescents' beliefs about risky relationship behaviors, an individual factor (self-esteem) also is important to assess. High self-esteem has been shown to be protective against engaging in unprotected sex (Ethier et al., 2006) and verbal aggression in a dating relationship (Jones & Gardner, 2002). Higher self-esteem also is associated with greater comfort in talking about sex (Chapman & Werner-Wilson, 2008). However, some studies have found differences in the association between self-esteem and risky relationship behaviors and attitudes by gender. That is, high self-esteem has been found to act as a protective factor for female engagement in risky relationship behavior and a risk factor for male engagement in risky relationship behavior (Sharpe & Taylor, 1999; Spencer et al., 2002). Further examination is needed to understand the role of self-esteem on adolescent sexual and dating violence attitudes. Past research shows that both parental and friend support are positively associated with adolescent self-esteem, and parental and friend control negatively associated with adolescent self-esteem; however, many of the reviewed included homogenous samples or samples of older adolescents. Thus, in the current study we will examine whether support and control from parents and best friends influence self-esteem similarly in a more ethnically diverse, younger sample of adolescents.

We also aim to examine whether support, control, and self-esteem influence early adolescents' attitudes about risky sexual behavior and dating aggression, and we will test whether self-esteem mediates associations between support/control and attitudes. Only three studies were found that examined self-esteem as a mediator of relationships among support and risky relationship behaviors and attitudes about risky relationship behaviors (Kerpelman et al., 2013; Pflieger & Vazsonyi, 2006; Slicker et al., 2004). Thus, the current study will further

explore how self-esteem operates in terms of mediation associations among parental and friend support/control and adolescents' attitudes about risky sexual behavior and dating aggression.

Many of the reviewed studies controlled for age, gender, and race/ethnicity, as mean differences in parent and peer support, self-esteem, and risky relationship behaviors and attitudes were found across different levels of these demographic variables. Our sample is 64% female, largely African American (69%) and Caucasian (25%), and includes adolescents ranging in age from 11 to 14 years. Therefore, we will control for these demographic variables when examining the influence of support and control from parents and friends on adolescents' attitudes about risky relationship behaviors. It also will be important to control for dating experience, as such experience may influence adolescents' beliefs about dating behavior. We will examine gender as a potential moderator of the associations between parent and best friend support/control, self-esteem, and attitudes about risky relationship behavior. Previous literature has found differences in these associations, such that peer support was more influential among females than males, with one study showing that peer support was important in female engagement in risky sexual behaviors, whereas parent support mattered more for males (Ramiro et al., 2013). In addition, self-esteem has been found to protect against female engagement in risky relationship behavior, while serving as a risk factor for male engagement in risky relationship behavior (Sharpe & Taylor, 1999; Spencer et al., 2002).

The current study aims to address the following research questions and hypotheses:

1. Do parental and best friend support, parental psychological control, and best friend possessiveness influence adolescents' attitudes about risky relationship behaviors? It is hypothesized that parental and best friend support will be negatively associated with attitudes about dating violence and risky sexual behavior, and parental

psychological control and best friend possessiveness will be positively related to attitudes about dating violence and risky sexual behaviors (hypothesis 1)

2. Is parental support/psychological control or best friend support/possessiveness more strongly associated with adolescents' attitudes about (a) dating violence; (b) risky sexual behavior? It is hypothesized that best friend support will be stronger than parental support in its association with attitudes about dating violence and risky sexual behavior (hypothesis 2). We also will explore whether there are strength differences in the association between parental psychological control and friend possessiveness with attitudes about dating violence or risky sexual behavior.
3. Is self-esteem associated with adolescents' attitudes about risky relationship behaviors? It is expected that self-esteem will be negatively related to attitudes about dating violence and risky sexual behavior (hypothesis 3).
4. Does self-esteem mediate associations between relationships with parents and best friends and attitudes? It is hypothesized that self-esteem will mediate associations between parent support/best friend support and attitudes about risky sexual behavior and dating violence, as well as associations between parental psychological control/best friend possessiveness and attitudes about risky sexual behavior and dating violence (hypothesis 4).
5. Does gender moderate associations among support, control/possessiveness, self-esteem, and attitudes about dating violence and risky sexual behavior?

III. METHOD

Participants and Procedures

Data for the present study were collected during Spring and Fall 2010 from 6th, 7th, and 8th grade students attending 38 public schools distributed across a Southern state. Although the larger project was an intervention study evaluating a relationship education curriculum, the current study was not part of that evaluation. Rather, it used only the pre-test data that preceded any programming.

Prior to hypothesis testing, the data for spring and fall cohorts were compared using independent samples t-tests. No significant differences were found on any study variables, so the two datasets were combined for analysis. This combined sample consisted of 2,147 middle school students. We restricted our sample to adolescents aged 11 – 14 (n = 1888) since our focus was on the early adolescent period (Eccles, 1999). Participants were given a choice to think about a close friend or a dating partner when responding to several sets of questions about relationship support and possessiveness. The sample for the current study was limited to only those participants who indicated their responses were based on thinking about their closest friend (n = 717). The average age of participants was 12.72 years (sd = .88). The sample was 64% female; 69% were African American, 25% were European American with the remaining participants identified as other (Hispanic/Latino, Asian American, or Native American). Slightly less than half (47%) reported never having a dating partner. Among those who had dating experience, the mean number of partners was 2.2 (sd = 3.0).

Measures

Sexual behavior attitudes. Six items were taken from an evaluation of a relationship and marriage curriculum (Gardner, Giese, & Parrott, 2004) to measure risky sexual beliefs.

Responses range from 1 (strongly disagree) to 5 (strongly agree). One item addressed perceived riskiness of sex, "It is risky for me to have sex." Three of the items assessed intent to delay sexual activity with a partner until the adolescent felt ready, using the stem *In future dating relationships I plan to: "*Say "no" if I am being pressured to have sex; Wait to have sex until after I really get to know the person I am dating; Wait to have sex until I really feel emotionally close to my partner." These first four items were recoded so that higher scores indicated riskier beliefs. The last two items assessed expectations of greater status associated with sexual activity for both males and females: "If a boy my age has sexual intercourse, he proves he is a man; If a girl my age has sexual intercourse, she proves she is a woman." Reliability of the six sexual behavior attitudes items in the current study was α = .60. Risky sexual attitudes were modeled as an observed composite.

Dating violence attitudes. Physical and psychological dating violence attitudes were measured separately with four items each (adapted from Foshee, 1996). Respondents used a 4-point Likert-type scale (1=Never; 4=Always) to indicate the extent to which they felt given behaviors were acceptable a person became angry in their relationship. A sample item for attitudes about physical dating violence is "slamming the partner against a wall;" and for psychological dating violence is "threatening to hurt a partner." Two latent factors were created (physical and psychological dating violence), each with four items as indicators.

Parental support. Parental support was a latent factor with four indicators (3 items and one composite). The composite indicator is based on five items from the Quality of Relationships Inventory (QRI; Pierce, Sarason, & Sarason,1991) which assesses perceptions of available social support within the parent-adolescent relationship (e.g., "How comfortable are you turning to a parent figure for help with problems?"). Respondents used a 4-point Likert-type

scale (1=Not at all; 4 = Very much). Reliability of the five items from the QRI was good (α = .91). Three items addressing perceived parental support to discuss dating relationship concerns will serve as the additional indicators for the parental support factor. An example item is: "How comfortable do you feel turning to your parent (parent figure) to discuss the questions or concerns you have about dating relationships?" Higher scores on the latent factor indicate greater parental support.

Best friend support. Three composites were used as indicators of the latent construct, best friend support. Two composites were drawn from the Relationship Experience Measure (REM) developed by Levesque (1993). For this study, three items from the emotional support subscale (α = .81) and three items from the communication subscale (α = .71) were used to create the two composites. Respondents used a 5-point Likert-type scale (1 = strongly disagree; 5 = strongly agree). A sample item for emotional support is "This person comforts me when I need comforting," and a sample item for receiving supportive communication from the peer is "This person listens to me when I need someone to talk to." The third composite is based on two items used to assess relationship support (α = .73; Pierce, Sarason & Sarason, 1991). A sample item is "How much could you count on this person for help with a problem?" Items are rated on a 4-point Likert-type scale ranging from 1 (very little) to 4 (a lot). Higher scores indicate greater best friend support.

Parental psychological control. Parental psychological control was a latent factor with five items as indicators. These items were drawn from the Psychological Control Scale—Youth Self-Report (PCS-YSR; Barber, 1996). Sample items include "My parents (parent figures) are people who: (a) change the subject whenever I talk, (b) often interrupt me." Response options ranged from 1 to 3, with respondents indicating whether the statement was "not like them (their

parents)," "somewhat like them," or "a lot like them." Higher scores indicate greater parental psychological control.

Best friend possessiveness. Two items were used as indicators of the best friend possessiveness latent factor. These items were drawn from the Relationship Experience Measure (Levesque, 1993). Respondents used a 5-point Likert-type scale (1 = strongly disagree; 5 = strongly agree) to answer items while thinking about their closest friend. These items include "Sometimes this person does not believe I care about him/her" and "This person is jealous of my relationships with other people." Higher scores indicate greater best friend possessiveness.

Self-esteem. The latent factor, self-esteem, was measured using five items from the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965; Silber & Tippett, 1965). The five positively worded items were selected for the current study (note. In a college sample, the positively and negatively worded items loaded onto separate factors). Answers were measured using a 5-point Likert-type scale with responses ranging from 1 (strongly disagree) to 5 (strongly agree). A sample item is "I feel that I have a number of good qualities." Higher scores indicate higher self-esteem.

Demographic control variables. Demographic control variables include: gender (1 = female, 0 = male), age (in years), race/ethnicity (1 dummy code will be used: White = 1, 0 = All other Ethnicities), and dating experience (Ever gone on a date =1, 0 = Never gone on a date). These variables were used as controls throughout analyses. When gender was tested as a moderator, it was removed as a control variable.

IV. RESULTS

The current study examined associations among support and control from parents and best friends with attitudes about risky dating behaviors (i.e., dating violence and risky sexual behavior). Also examined were associations between self-esteem and attitudes about risky dating behaviors, and whether self-esteem mediated associations between support/control and risky dating behavior attitudes. Structural equation modeling (SEM) was used to test the study hypotheses, and multigroup analysis tested whether gender moderated associations among the variables in the model. All analyses controlled for gender, age, race/ethnicity, and whether the youth had any dating experience.

Descriptive Statistics

Univariate analyses were conducted to assess the distribution of each variable. Skew statistics were examined to determine whether variables needed to be transformed. Variables with skew statistics greater than the absolute value of one were transformed using either the square root method (sqrt(x)) or the log10(x) method. Examination of histograms and skew statistics showed that most predictor variables were relatively symmetric (skew statistics between -1 and 1), but the outcome variables were not. Despite transformation of the dating violence attitudes and three of the risky sex attitudes variables, these variables remained positively skewed. Analyses were conducted with transformed and non-transformed variables with few differences in associations found (see Table 1 in Appendix B). Given few differences and little improvement in skew following transformation, original variables were used in analyses testing the study hypotheses. Means and standard deviations of all variables were calculated for the entire sample (see Table 1). Overall the pattern of means showed that best friend support and self-esteem were relatively high, parent support was moderate, and

possessiveness, psychological control and attitudes about risky sexual behavior and dating violence were relatively low.

Correlations

Pearson correlations were used to examine associations among all variables. All items and composites used to measure a given latent construct had significant intercorrelations (see Tables 2 – 4). In addition, all significant correlations across constructs were in the hypothesized direction (see Tables 2 - 6). Parental support, best friend support and self-esteem were positively associated with each other, and best friend support was negatively associated with dating violence and risky sex attitudes. Higher self-esteem also was associated with attitudes that were less accepting of dating violence and risky sexual behavior. In addition, parental psychological control and friend possessiveness were positively associated with each other; parental psychological control but not friend possessiveness was negatively associated with self-esteem. Parental psychological control and best friend possessiveness were positively associated with dating violence attitudes, but counter to expectation, support from parents was unrelated to dating violence attitudes, and only one indicator of parental support was associated with less accepting attitudes about risky sexual behavior. Finally, parental psychological control was not associated with attitudes about risky sexual behavior.

Table 1. Means and Standard Deviations for All Variables

Variable	M (SD)
Best Friend Support	
Communication Support (3 items)	3.70 (1.16)
Emotional Support (3 items)	3.89 (1.11)
General Support (2 items)	3.22 (.84)
Best Friend Possessiveness	
Possessiveness 1	2.21 (1.42)
Possessiveness 2	1.94 (1.37)
Parent Support	
Parent Support 1	2.41 (1.14)
Parent Support 2	2.15 (1.18)
Parent Support 3	2.53 (1.20)
Overall Parent Support (5 items)	2.74 (.95)
Parental Psychological Control	
Parental psychological control 1	1.38 (.61)
Parental psychological control 2	1.56 (.71)
Parental psychological control 3	1.76 (.78)
Parental psychological control 4	1.66 (.76)
Parental psychological control 5	1.66 (.81)

Variable	M (SD)
Self-esteem	
Self-esteem 1	3.73 (1.24)
Self-esteem 2	4.08 (1.08)
Self-esteem 3	4.04 (1.11)
Self-esteem 4	4.11 (1.11)
Self-esteem 5	4.18 (1.09)
Physical Dating Violence Attitudes	
Physical DV attitudes 1	1.39 (.81)
Physical DV attitudes 2	1.26 (.70)
Physical DV attitudes 3	1.27 (.71)
Physical DV attitudes 4	1.26 (.71)
Psychological Dating Violence Attitudes	
Psychological DV attitudes 1	1.40 (.75)
Psychological DV attitudes 2	1.63 (.94)
Psychological DV attitudes 3	1.37 (.75)
Psychological DV attitudes 4	1.41 (.80)
Risky Sexual Attitudes (6 items)	2.00 (.82)

Table 2. Correlations Among Parent Support and Parental Psychological Control

	Parent Support 1	Parent Support 2	Parent Support 3	Overall Parent Support	Parental Control 1	Parental Control 2	Parental Control 3	Parental Control 4	Parental Control 5
Parent Support 1	-								
Parent Support 2	.53**	-							
Parent Support 3	.62**	.44**	-						
Overall Parent Support	.28**	.24**	.31**	-					
Parental Control 1	-.03	.02	-.05	-.10*	-				
Parental Control 2	-.04	.00	-.12**	-.13**	.54**	-			
Parental Control 3	-.06	.00	-.11**	.00	.21**	.27**	-		
Parental Control 4	-.05	.00	-.04	-.08	.40**	.44**	.44**	-	
Parental Control 5	-.06	-.02	-.09*	-.16**	.39**	.50**	.26**	.44**	-

Parental control=parental psychological control; *p<.05; **p<.01

Table 3. Correlations Among Best Friend Support, Best Friend Possessiveness, and Self-esteem

	Communication Support	Emotional Support	General Support	Possessive 1	Possessive 2	Self-esteem 1	Self-esteem 2	Self-esteem 3	Self-esteem 4	Self-esteem 5
Communication Support	-									
Emotional Support	.69**	-								
General Support	.52**	.61**	-							
Possessive 1	-.10**	-.10**	-.15**	-						
Possessive 2	-.10*	-.08*	-.13**	.50**	-					
Self-esteem 1	.19**	.13***	.12**	-.07	-.06	-				
Self-esteem 2	.16**	.12**	.13**	-.05	-.07	.63**	-			
Self-esteem 3	.09*	.08*	.18**	-.07	-.03	.52**	.67**	-		
Self-esteem 4	.04	.04	.08*	-.01	-.03	.47**	.65**	.62**	-	
Self-esteem 5	.10*	.07	.04	.00	-.03	.44**	.64**	.52**	.68**	-

Possessive=friend possessiveness; *p<.05; **p<.01

Table 4. Correlations Among Physical and Psychological Dating Violence Attitudes and Risky Sexual Attitudes

	Phys DV Attitudes 1	Phys DV Attitudes 2	Phys DV Attitudes 3	Phys DV Attitudes 4	Psych DV Attitudes 1	Psych DV Attitudes 2	Psych DV Attitudes 3	Psych DV Attitudes 4	Risky Sex Attitudes
Phys DV Attitudes 1	-								
Phys DV Attitudes 2	.66**	-							
Phys DV Attitudes 3	.69**	.79**	-						
Phys DV Attitudes 4	.70**	.76**	.84**	-					
Psych DV Attitudes 1	.51**	.58**	.55*	.55**	-				
Psych DV Attitudes 2	.28**	.32**	.34**	.34**	.37**	-			
Psych DV Attitudes 3	.53**	.53**	.54**	.52**	.51**	.32**	-		
Psych DV Attitudes 4	.49**	.62**	.57**	.55**	.55**	.31**	.61**	-	
Risky Sex Attitudes	.03	.05	.04	.05	.04	.05	.05	.00	-

Phys DV Attitudes=Physical dating violence attitudes, Psych DV Attitudes=Psychological dating violence attitudes; *p<.05; **p<.01

Table 5. Correlations Among Friend Support and Possessiveness, Parent support and Parental Psychological Control, and Self-esteem

	Parent Support 1	Parent Support 2	Parent Support 3	Overall Parent Support	Parental Control 1	Parental Control 2	Parental Control 3	Parental Control 4	Parental Control 5
Friend Communication Support	.12**	.09*	.14**	.13**	-.03	-.06	-.01	.00	-.01
Friend Emotional Support	.13**	.12**	.16**	.17**	.01	-.05	-.05	-.02	.01
General Friend Support	.16**	.14**	.21**	.20**	-.04	-.05	-.02	-.03	-.01
Possessiveness 2	.00	.02	.01	-.08	.10*	.09*	.02	.04	.09*
Possessiveness 3	.07	.06	.04	-.05	.11**	.10*	.01	.06	.15**
Self-esteem 1	.10**	.13**	.11**	.28**	-.07	-.07	-.06	-.13**	-.06
Self-esteem 2	.15**	.16**	.18**	.32**	-.13**	-.13**	.00	-.09*	-.13**
Self-esteem 3	.14**	.14**	.13**	.26**	-.09*	-.07	.04	-.04	-.06
Self-esteem 4	.13**	.13**	.13**	.29**	-.12**	-.09*	.01	-.09*	-.12**
Self-esteem 5	.18**	.13**	.15**	.26**	-.12**	-.09*	.09	-.05	-.14**

Parental control=parental psychological control; *p<.05; **p<.01

Table 6. Correlations of Predictor Variables with Outcome Variables

	Phys DV Attitudes 1	Phys DV Attitudes 2	Phys DV Attitudes 3	Phys DV Attitudes 4	Psych DV Attitudes 1	Psych DV Attitudes 2	Psych DV Attitudes 3	Psych DV Attitudes 4	Risky Sex Attitudes
Friend Comm Support	-.04	-.05	-.05	-.07	-.02	-.06	-.12**	-.07	-.16**
Friend Emotional Support	-.10*	-.07	-.07	-.08*	-.03	-.03	-.11**	-.06	-.16**
General Friend Support	-.04	-.09*	-.07	-.08*	-.08*	-.05	-.08*	-.08*	-.15**
Possessiveness 1	.10**	.09*	.10*	.13**	.12**	.05	.09**	.12**	.08*
Possessiveness 2	.11**	.10**	.07	.08*	.12**	.05	.08*	.13**	.08
Parent Support 1	-.01	-.01	.01	-.02	.00	.04	.01	.01	-.01
Parent Support 2	.00	-.03	-.03	-.04	-.02	.04	.06	-.03	.01
Parent Support 3	-.03	-.06	-.04	-.05	.00	.03	.01	-.02	-.07
Overall Parent Support	-.02	-.04	-.05	-.05	-.03	-.06	-.03	-.02	-.14**
Parental Control 1	.03	.09*	.08*	.09*	.04	.05	.02	.10*	.05
Parental Control 2	.06	.15**	.13**	.08*	.06	.10*	.09*	.08*	.05
Parental Control 3	.18**	.15**	.15**	.14**	.11**	.04	.11**	.12**	.04
Parental Control 4	.09*	.14**	.16**	.15**	.09*	.16**	.08	.17**	.05
Parental Control 5	.09*	.13**	.11**	.07	.06	.13**	.09*	.12**	.07
Self-esteem 1	-.05	-.14**	-.09*	-.09*	-.03	-.05	-.09*	-.10*	-.18**
Self-esteem 2	-.03	-.17**	-.11**	-.12**	-.03	-.05	-.10*	-.11**	-.19**
Self-esteem 3	.07	-.05	.00	-.02	-.02	-.01	-.02	.00	-.10*
Self-esteem 4	.01	-.11**	-.05	-.07	.01	-.01	-.03	-.06	-.08
Self-esteem 5	-.01	-.07	-.08	-.07	.04	-.02	-.04	-.04	-.11*

Parental control=parental psychological control; *p<.05; **p<.01

Testing the Hypothesized Model

Prior to testing the study hypotheses, confirmatory factory analyses were conducted to examine the fit of the measurement model. The measurement model included seven latent variables. These were parent support, parental psychological control, best friend support, best friend possessiveness, self-esteem, psychological dating violence attitudes, and physical dating violence attitudes. Full Information Maximum Likelihood (FIML) was used to manage missing data. Several goodness-of-fit statistics were used to assess model fit. A X^2 that is small and non-significant indicates good model fit. However, X^2 is sensitive to sample size and likely to be significant in larger samples; therefore, $X^2/ df < 3$ indicates good model fit (Bollen, 1989; Wheaton, Muthen, Alwin, & Summers, 1977). Other fit indices consulted include the Tucker-Lewis Index (TLI) and Comparative Fit Index (CFI), which indicate how much better this model fits when compared to a baseline model; values should be between .90 and 1.00. Finally, the Root Mean Square Error of Approximation (RMSEA) should be less than .05 and not statistically significant (Heck & Thomas, 2009).

The measurement model was fit to the overall data; all fit statistics indicated that the model fit the data well. Additionally, all indicators significantly loaded onto their respective latent factors (see Table 7).

Table 7. Factor Loadings for Latent Variables

Factor	*B*	*SE B*	*β*
Parent Support			
Parent Support 1	1.00	.00	.82
Parent Support 2	.79	.06	.62
Parent Support 3	.97	.06	.75
Overall Parent Support	.40	.05	.39
Parent Psychological Control			
Parental psychological control 1	.74	.05	.64
Parental psychological control 2	1.00	.00	.74
Parental psychological control 3	.63	.07	.43
Parental psychological control 4	.94	.08	.65
Parental psychological control 5	1.01	.08	.65
Best Friend Support			
Communication Support	1.00	.00	.78
Emotional Support	1.09	.06	.88
General Support	.65	.04	.69
Best Friend Possessiveness			
Possessiveness 1	1.00	.00	.66
Possessiveness 2	1.11	.23	.76
Self-Esteem			
Self-esteem 1	1.00	.00	.67
Self-esteem 2	1.14	.06	.87
Self-esteem 3	1.03	.06	.76
Self-esteem 4	1.07	.07	.79
Self-esteem 5	.98	.06	.75
Psychological Dating Violence Attitudes			
Psychological DV attitudes 1	1.00	.00	.73
Psychological DV attitudes 2	.75	.07	.44
Psychological DV attitudes 3	1.01	.06	.74
Psychological DV attitudes 4	1.15	.06	.78
Physical Dating Violence Attitudes			
Physical DV attitudes 1	1.00	.00	.77
Physical DV attitudes 2	.99	.04	.86
Physical DV attitudes 3	1.05	.04	.91
Physical DV attitudes 4	1.03	.04	.90

All factors significantly load at $p<.001$; Model fit: $X^2/df=2.06$, CFI=.96, TLI=.95, RMSEA=.04, *ns*
Note: Subsequent CFA and SEM analyses that excluded overall parent support yielded similar results to CFA and SEM analyses with overall parent support included as an indicator (see Tables 10 – 11 in Appendix B)

Findings for the **first research hypothesis** [*Parent and best friend support will be negatively related to attitudes accepting of risky relationship behaviors, and parental psychological control and best friend possessiveness will be positively related to attitudes accepting of risky relationship behaviors]* indicated that greater best friend support was related to attitudes less accepting of risky sexual behavior and psychological dating violence. Greater best friend possessiveness and parental psychological control predicted attitudes more accepting of psychological dating violence. Greater parental psychological control also was related to attitudes more accepting of physical dating violence. Parental support did not significantly predict attitudes about risky sex or dating violence (see Figure 2). Taken together, the parent and friend variables explained 8% of the variance in risky sex attitudes, 5% of the variance in physical dating violence attitudes, and 7% of the variance in psychological dating violence attitudes.

The **second research hypothesis** was that *best friend support would be more strongly associated with adolescents' attitudes about risky sexual behavior and dating violence than would parental support*. Based on the analysis testing the first hypothesis, only best friend support was significantly related to any of the attitude variables. A ΔX^2 test was conducted confirming that the path from best friend support to risky sex attitudes differed from the path between parental support and risky sex attitudes ($\Delta X^2 = 6.71$; see Table 2 in Appendix B). This finding supports the expectation that friend support would be more strongly related than parental support to the risky behavior attitudes. Additional analyses indicated no differences in the paths from parent support and best friend support to physical dating violence attitudes, as well as the paths from parent support and best friend support to psychological dating violence attitudes (ΔX^2 = 1.50 and 3.20, respectively, see Tables 3 – 4 in Appendix B).

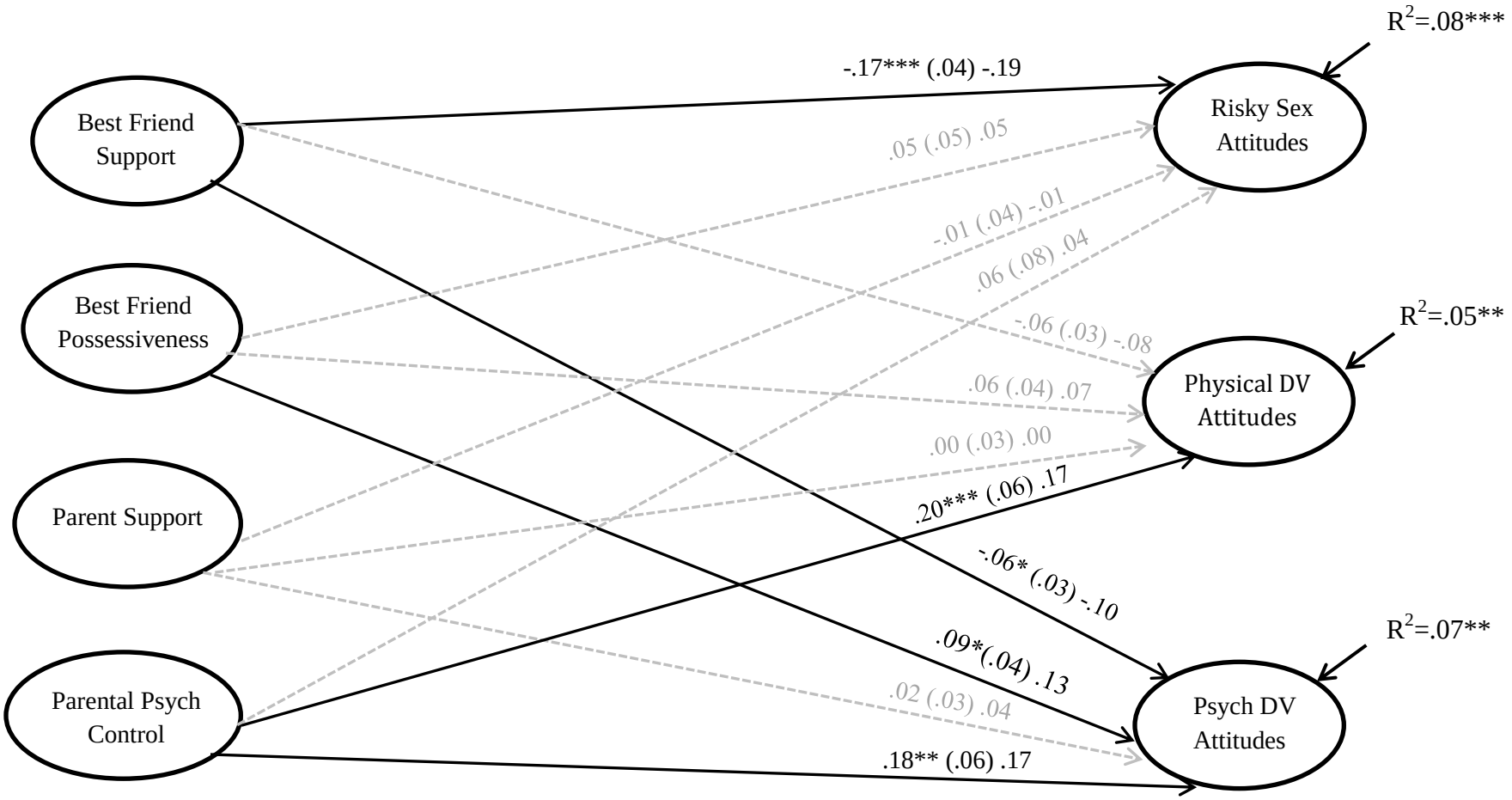

Figure 2. Fitted Path Diagram (X^2/df=1.63, CFI=.97, TLI=.96, RMSEA=.03, *ns*): Risky sex and dating violence attitudes regressed on parental and best friend support and control/possessiveness. Control variables are included in the model but not shown. Unstandardized coefficients (standard error) and standardized coefficients reported. *p<.05; **p<.01; ***p<.001

It also was found that best friend possessiveness and parental psychological control were significantly related to psychological dating violence attitudes, and 7% of the variance was explained. To explore strength differences in these associations, the path from friend possessiveness to psychological dating violence attitudes was constrained to be equal to the path from parental psychological control to psychological dating violence attitudes, and a ΔX^2 test was conducted. The ΔX^2 value was less than the critical X^2 value indicating that the paths were equal ($\Delta X^2 = 1.38$; see Table 5 in Appendix B).

Self-esteem will be negatively related to attitudes accepting of risky sexual behavior and dating violence was posed for the **third research hypothesis**. Results indicated that self-esteem negatively predicted risky sex attitudes and physical dating violence attitudes (see Figure 3). That is, when youth have higher self-esteem they hold less accepting attitudes about engaging in risky sexual behavior and physical dating violence. Self-esteem explained 7.4% of the variance in risky sex attitudes; however, self-esteem did not explain significant variance in physical or psychological dating violence attitudes. In addition, we explored whether parental support or parental psychological control was more strongly associated with self-esteem. The paths were constrained to be equal and a ΔX^2 test conducted ($\Delta X^2 = 22.80$; see Table 6 in Appendix B). The ΔX^2 value was greater than the X^2 critical value; therefore, parental support had a stronger relationship with self-esteem than did parental psychological control.

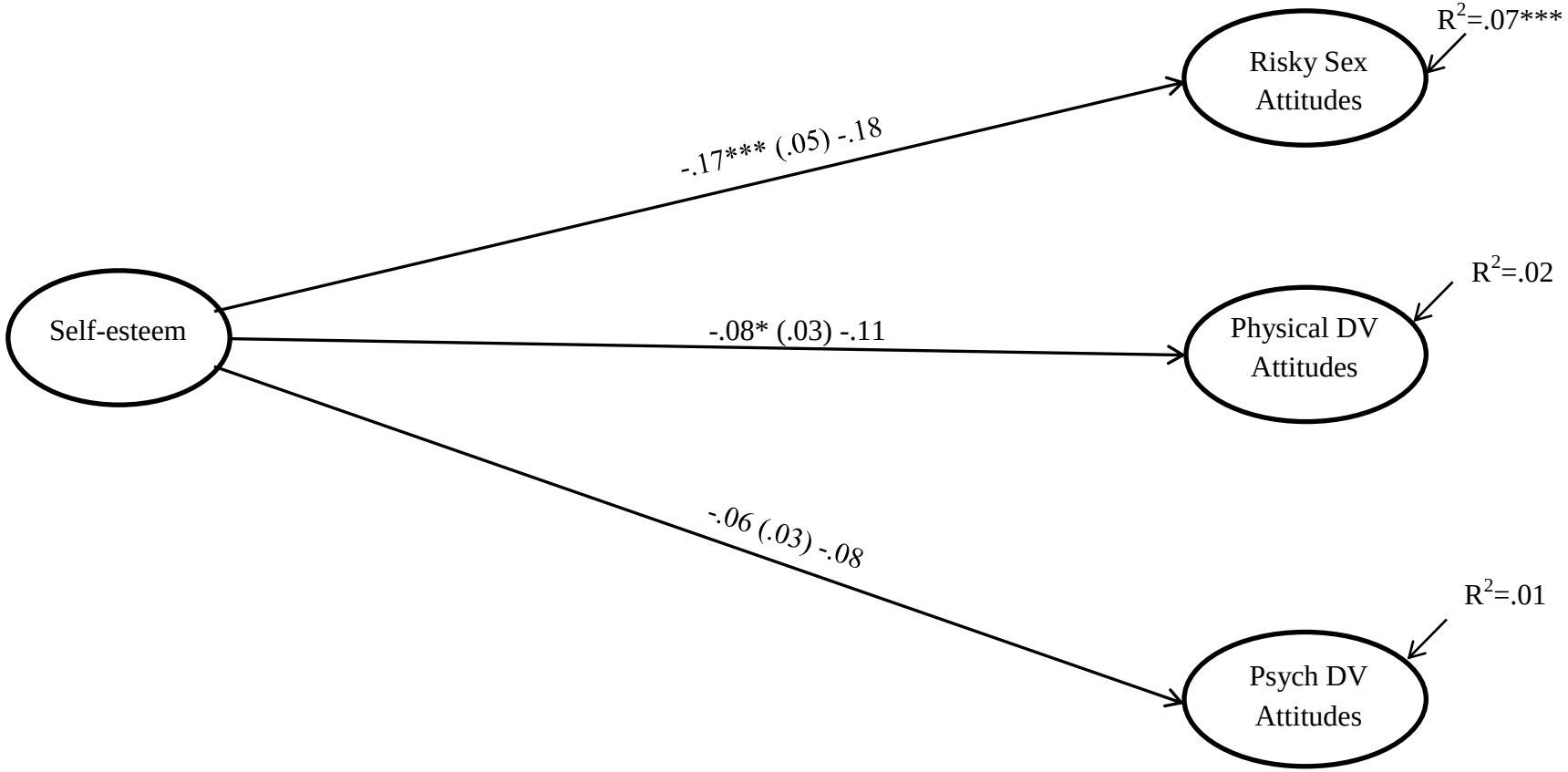

Figure 3. Fitted Path Diagram (X^2/df=2.51, CFI=.97, TLI=.96, RMSEA=.05, *ns*): Risky sex and dating violence attitudes regressed on self-esteem. Control variables are included in the model but not shown. Unstandardized coefficients (standard errors) and standardized coefficients reported. *p<.05; ***p<.001

For the **fourth research hypothesis** it was expected that *self-esteem would mediate associations among support, control/possessiveness, and attitudes.* Self-esteem was tested as a mediator of the association between best friend support and attitudes about risky sexual behavior using criteria for testing mediation set forth by Baron and Kenny (1986). Specifically, a) The predictor (best friend support) explains variance in the mediator (self-esteem); see Figure 4; b) The mediator (self-esteem) explains variance in the outcome (risky sex attitudes); examined for the third research hypothesis (see Figure 3); c) The predictor (best friend support) explains variance in the outcome (risky sex attitudes); examined for the first research hypothesis (see Figure 2); and d) The predictor (best friend support) no longer explains variance in the outcome (risky sex attitudes) once self-esteem is included in the previous model.

The first three criteria for mediation were met, and to test whether mediation exists, a ΔX^2 test was conducted to determine whether the path from best friend support to risky sex attitudes was zero in the population. The chi-square for the model with the path from best friend support to risky sex attitudes was constrained to zero and compared to the chi-square for the model when this path was free to be estimated. The ΔX^2 value was larger than the critical X^2 value; therefore, the fourth criterion for mediation was not met, and the mediation hypothesis not supported ($\Delta X^2 = 14.39$; see Table 7 in Appendix B).

No other associations met the first three criteria of mediation; however, several tests for indirect effects were conducted. The results of these tests indicated that there were no indirect effects of best friend support on risky sex attitudes ($\beta = -.01$, $p = .10$) or parental psychological control on risky sex attitudes ($\beta = .02$, $p = .07$). However, an indirect effect was found in the association between parental support and risky sex attitudes through self-esteem ($\beta = -.03$, $p <$

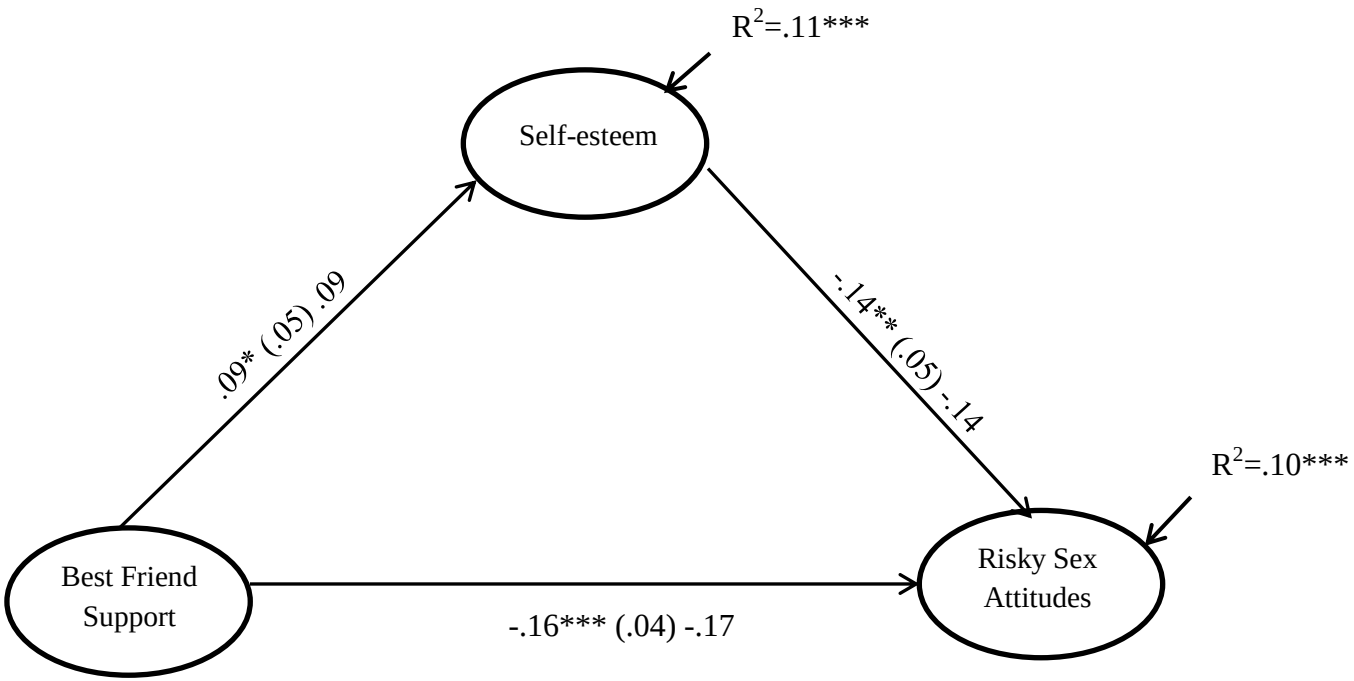

Figure 4. Fitted path diagram for mediation (X^2/df=3.27, CFI=.96, TLI=.93, RMSEA=.06, *ns*): Risky sex attitudes regressed on self-esteem and best friend support and self-esteem regressed on best friend support (all other variables, including controls, are included in the model but not shown). Unstandardized coefficients (standard errors) and standardized coefficients reported. *p<.05; **p<.01; ***p<.001

.05). That is, greater parental support was associated with higher self-esteem, which was associated with less accepting attitudes about engaging in risky sexual behavior.

The **final research question asked whether** *gender would moderate associations among support, control/possessiveness, self-esteem and attitudes about dating violence and risky sexual behavior.* Gender comparisons for the estimated means for the latent factors and sexual attitudes (males = 2.06, females = 1.97; $t = 1.16$, $p = .25$) showed no significant differences (see Table 8). Initial examination of parameter estimates resulting from the multi-group analysis revealed potential differences in associations by gender (see Table 9).

Support from parents and best friends significantly predicted higher self-esteem among girls, but it was only the parenting variables (support and psychological control) that influenced boys' self-esteem. That is, male youth with greater parental support had higher self-esteem and those with greater parental psychological control had lower self-esteem. None of the parent or friend variables significantly influenced boys' attitudes about risky sex; however, girls' attitudes about risky sex were negatively influenced by self-esteem and best friend support, with significant variance in risky sex attitudes explained among girls (15%) but not among boys (5%). Only best friend possessiveness was associated with boys' holding more accepting attitudes about physical and psychological dating violence. Furthermore, significant variance in physical dating violence attitudes was explained by the parent and friend variables among boys (11%) but not among girls (4%). Among girls, only parental psychological control was associated with attitudes more accepting of psychological dating violence. To test whether any of these patterns of associations were significantly different for girls and boys, each individual path was constrained, one at a time, to be equal across gender and ΔX^2 tests conducted. The model with the unconstrained path was then compared to the model with the constrained path. A ΔX^2 value

greater than the X^2 critical value indicates that the paths are different in strength between girls and boys. If an individual path was the same for both girls and boys, that path was constrained to be equal and the next path tested. No gender differences were found; therefore, we conclude that all paths are equal across gender (see Figure 5). Fit statistics reflect the fit of the final model, with all paths constrained to be equal across gender (see Table 8 in Appendix B).

Despite the lack of gender differences in the strengths of the paths of the model, examination of the overall patterns and amount of variance explained in the outcome variables suggested that this model may be a better predictor for boys compared to girls in areas of self-esteem and dating violence attitudes. In contrast, the model may be a better predictor of risky sexual attitudes for girls than for boys. We conducted ΔX^2 tests to determine whether variance explained differed by gender; however, no significant differences were found (see Table 9 in Appendix B).

Table 8. Estimated Means and Standard Deviations for the Latent Constructs in the Full Sample and Estimated Discrepancies by Gender

	Full Sample M (SD)	Male to Female†
Best friend support	3.35 (.89)	-.12
Best friend possessiveness	2.51 (.82)	.07
Parent support	1.91 (.93)	-.13
Parental psych control	1.38 (.53)	-.02
Self-esteem	3.79 (.78)	-.67
Physical dating violence	1.79 (.60)	-.74
Psych dating violence	1.33 (.53)	-.89

†Numbers indicate mean differences between girls and boys on latent constructs. If significant, a positive number indicates the second category is greater than the first, and a negative indicates the opposite.

Table 9. Standardized and Unstandardized Parameter Estimates, Standard Errors, R-squares, and Fit Statistics for Risky Sex Attitudes and Dating Violence Attitudes Regressed on Parental and Best Friend Support and Control/Possessiveness and Self-esteem for Girls and Boys

	Girls				Boys			
	B	*SE B*	*β*	R^2	*B*	*SE B*	*β*	R^2
Self-esteem on				.09**				.19***
Best friend support	.10	.05	.12*		.08	.09	.07	
Best friend possessiveness	-.07	.06	-.07		-.01	.09	-.01	
Parent support	.17	.06	.20**		.32	.08	.35***	
Parent psych control	-.15	.14	-.07		-.44	.17	-.22**	
Age	.04	.06	.04		-.02	.06	-.02	
Race/ethnicity	.15	.10	.08		.18	.13	.10	
Dating experience	.08	.09	.05		.03	.11	.02	
Risky Sex Attitudes on				.15***				.05
Best friend support	-.15	.05	-.18***		-.16	.09	-.16	
Best friend possessiveness	.08	.06	.08		-.06	.09	-.07	
Parent support	.05	.05	.05		-.05	.08	-.05	
Parent psych control	.12	.13	.05		.02	.18	.01	
Self-esteem	-.19	.06	-.19***		-.04	.09	-.04	
Age	.01	.04	.01		.01	.04	.01	
Race/ethnicity	-.10	.10	-.05		-.19	.13	-.10	
Dating experience	-.37	.08	-.22***		-.12	.12	-.07	

	Girls				Boys			
	B	*SE B*	*β*	R^2	*B*	*SE B*	*β*	R^2
Physical Dating Violence Attitudes on				.04				.11*
Best friend support	-.03	.04	-.04		-.11	.06	-.14	
Best friend possessiveness	.02	.05	-.04		.14	.07	.17*	
Parent support	-.02	.04	.03		.07	.06	.10	
Parent psych control	.19	.11	.12		.23	.14	.14	
Self-esteem	-.07	.05	-.10		-.04	.07	-.05	
Age	-.01	.04	-.01		-.06	.05	-.09	
Race/ethnicity	.00	.07	.00		-.07	.09	-.05	
Dating experience	.01	.06	.01		-.05	.08	-.04	
Psychological Dating Violence Attitudes on				.05*				.13*
Best friend support	-.05	.03	-.08		-.09	.06	-.13	
Best friend possessiveness	.06	.04	.01		.15	.06	.23*	
Parent support	.01	.04	.09		.08	.05	.13	
Parent psych control	.20	.10	.14*		.19	.14	.14	
Self-esteem	-.05	.04	-.07		-.02	.06	-.03	
Age	.04	.04	.05		-.03	.04	-.05	
Race/ethnicity	-.05	.07	-.04		-.06	.09	-.05	
Dating experience	.04	.06	.03		.00	.08	.00	

*p<.05; **p<.01; ***p<.001

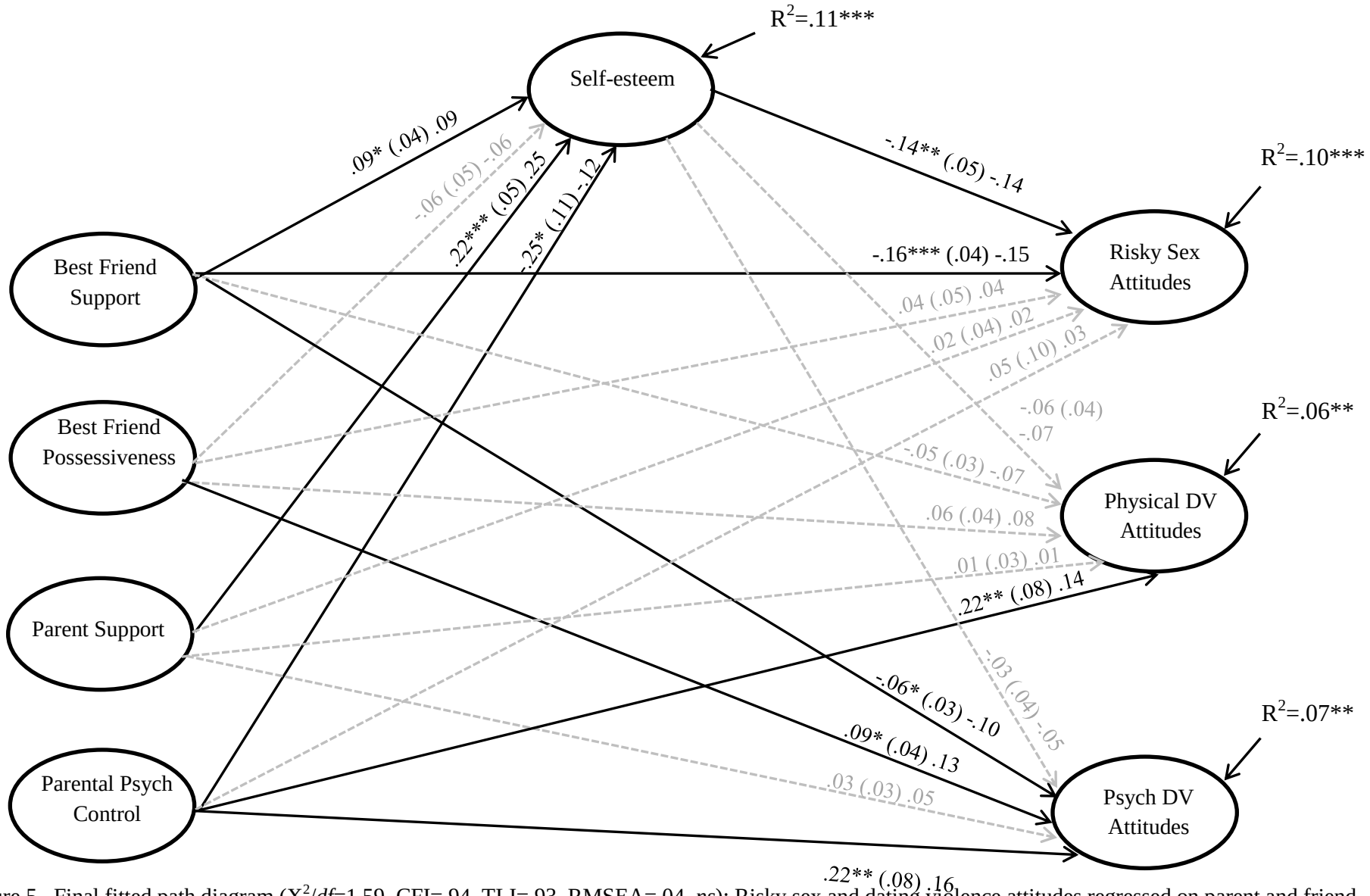

Figure 5. Final fitted path diagram (X^2/df=1.59, CFI=.94, TLI=.93, RMSEA=.04, *ns*): Risky sex and dating violence attitudes regressed on parent and friend support, control/possessiveness, and self-esteem. Control variables are included in the model but not shown. Unstandardized coefficients (standard errors) and standardized coefficients reported. *p<.05; **p<.01; ***p<.001

Note: Significant covariances were found between best friend support and best friend possessiveness (r=-.14, p<.01), best friend support and parent support (r=.23, p<.001), best friend possessiveness and parental psych control (r=.18 p<.001), and parent support and parental psych control (r=-.12, p<.05). The residual covariances between risky sex attitudes and the two dating violence attitudes were nonsignificant (r=.01, *ns*; r=.02, *ns*); psychological and physical dating violence had a residual covariance of (r=.83, p<.001).

V. DISCUSSION

The primary purpose of this research was to examine how support and controlling behaviors in relationships with parents and best friends influence adolescents' beliefs about dating violence and risky sexual behavior, and how self-esteem might operate in association with support, control, and risky relationship attitudes. In general, support was protective against adolescents' holding accepting attitudes about risky relationship behaviors, whereas control was related to adolescents being more accepting of risky relationship behaviors. More support from parents and best friends also predicted higher adolescent self-esteem, and higher self-esteem was related to less accepting attitudes about risky sexual behaviors. Additionally, lower adolescent self-esteem was associated with greater parental psychological control.

Support in relationships with parents and best friends and risky relationship attitudes

Surprisingly, parent support was not directly related to adolescents' beliefs about dating violence or risky sexual behavior but rather showed an indirect association with risky sexual behavior attitudes through self-esteem. One study found parental support was associated with adolescents' holding beliefs that they could say no to engaging in sex with their dating partner when pressured to have sex (Somers & Ali, 2011). Another study showed that parent support was positively associated with adolescents' holding less accepting attitudes toward dating violence (Pflieger & Vazsonyi, 2006). However, Somers and Ali included a slightly different assessment of attitudes about sex and did not assess adolescent self-esteem, and Pflieger and Vazsonyi included an older sample of adolescents. These differences may partially account for current study findings not supporting the findings of these prior two studies. In addition, other research has shown parent support predicts adolescent engagement in risky relationship behaviors indirectly (Kerpelman et al., 2013; Slicker et al., 2004). The findings of the current

study align most closely with these studies (focused on behaviors). Attachment theory and the concept of relational schemas indicate that adolescents who feel supported by their parents likely view themselves positively and as worthy of receiving love and respect from their parents as well as others, and adolescents develop relational schemas consistent with these past relationship experiences (Bowlby via Baldwin et al., 1996; Pittman et al., 2011). Therefore, parents who instill in their children a positive sense of self will have youth who believe that they are worth being treated positively by others and that they are worthy of being in a healthy dating relationship.

Furthermore, adolescents who perceive their parents as available and willing to discuss relationship-related topics might hold more positive attitudes regarding discussing topics of sexual behavior and romantic relationships. This might encourage adolescents to be more open to discussing their thoughts and opinions related to engaging in sexual or aggressive behaviors with their potential dating partners. Therefore, although parent support may not directly influence the attitudes adolescents hold regarding risky relationship behaviors, when adolescents believe their parents are supportive this promotes a positive sense of self, and may help adolescents to be more confident in their ability to talk with their partner about relationship-related topics. Although self-esteem and confidence in general were not measured in their study, Somers and Ali (2011) found that support from parents was associated with adolescents having greater confidence in their ability to say no to engaging in sex if they were pressured. Thus, openness to discussing these topics is thought to be associated with healthy adolescent attitudes about engaging in risky sexual behavior.

In contrast to the finding for parent support and adolescents' beliefs about risky sexual behavior, best friend support had a direct effect on adolescents' attitudes about risky relationship

behaviors (i.e., risky sexual behavior and psychological dating violence). This suggests that friends may begin playing a prominent role in youth's lives, particularly in areas such as influencing beliefs about dating as youth are just beginning to understand the nature of romantic relationships (Collins, 2003). This supports theoretical literature indicating that during adolescence youth begin turning to close friends for support and guidance more often than to parents (Markiewicz et al., 2006). Perhaps adolescents who have supportive friends feel comfortable talking with their friends about dating relationships, and it is through these conversations that adolescents receive feedback on their beliefs about relationship behaviors. Adolescents who do not feel supported by their close friends may not feel comfortable opening up to them about relationship-related issues. In the current study, as well as in past research, support from parents has been associated with support from friends (McDonald, Bowker, Rubin, Laursen, & Duchene, 2010; Wentzel, 1998); therefore, adolescents with less supportive parents and friends might remain in an unhealthy relationship, or turn to other sources of information (internet, media; Wood, Senn, Desmarais, Park, & Verberg, 2002) to form attitudes about relationship behaviors. Support from friends might also be viewed differently than support from parents. As youth enter early adolescence, parental support may involve less guidance/advice about day-to-day decisions and be focused more on issues such as doing well in school and addressing serious decisions or problems, as well as on instrumental support (financial, transportation) that parents rather than friends can provide during early adolescence. Friends may become the primary source to whom the adolescent turns for guidance and advice for day-to-day decisions and navigating the peer environment, such as understanding what their peers think about (and are doing in) dating relationships (Markiewicz et al., 2006).

The present findings for best friend support add to the small body of literature examining the positive role of supportive friends on adolescents' risky relationship behaviors and beliefs. Past findings have been mixed with regard to the direction of the association between friend support and risky relationship behaviors (Elkington et al., 2011; Kalina et al., 2011; Richards & Branch, 2012). The behaviors and attitudes that friends support may not always be positive ones, which may help explain the mixed findings in the literature. However, for the current study, best friend support was associated significantly with disapproving attitudes of risky sexual behavior and dating violence. Other studies also have found supportive friends to be associated with lower rates of engaging in dating violence and greater consistency in condom use (Elkington et al, 2011; Ramiro et al., 2013; Richards & Branch, 2012). Therefore, past and current findings indicate that support from friends can positively influence adolescent risky relationship behaviors and beliefs. The mixed findings across the literature on the role of friend support on risky relationship behaviors suggest that additional predictors and moderators need to be included in future studies in order to further understand under what conditions friend support positively or negatively influences adolescent outcomes.

Controlling behavior in relationships with parents and best friends and risky relationship attitudes

Findings for parental psychological control were consistent with hypotheses in that parental psychological control was positively related to attitudes more accepting of physical and psychological dating violence. Psychologically controlling parents use manipulation tactics such as guilt, threats, blame, and love withdrawal to control their children, and similar methods can also be seen in abusive dating relationships (Saltzman et al., 2002; Soenens et al., 2008). Therefore, adolescents who have learned that the use of controlling behaviors in relationships

with their parents is acceptable might also believe that it is acceptable to use similar behaviors in their dating relationships. In addition, because parental psychological control hinders the development of autonomy (Barber, 1996) youth might be led to rely on others to tell them how to think and feel and in making decisions. Youth who do not believe that their parents value their thoughts and opinions may feel that their thoughts do not matter in other relationships. This transference from one relationship to another supports the concept of relational schemas. Youth learn how to respond based on past experiences and if they have learned that their beliefs are not valued through these experiences, they are more likely to carry this belief into future relationships (Baldwin et al., 1993).

As expected, best friend possessiveness also was related to more accepting attitudes of the use of psychological violence in dating relationships. Similar to parental psychological control, adolescents who experience friendships characterized by jealousy, control, and dominance would also be more likely to believe that these behaviors are acceptable in dating relationships. This association also aligns with literature on relational schemas, which indicates that adolescents' past relationship experiences inform their expectations about future relational experiences (Baldwin et al., 1993). However, unlike parental psychological control, best friend possessiveness was unrelated to physical dating violence attitudes. Culotta and Goldstein (2008) had similar findings with friendship jealousy predicting adolescent relational aggression but not physical aggression. It might be that different aspects of parental psychological control are associated with physical and psychological dating violence attitudes, and that control within the parent-child relationship is experienced differently than control within a close friendship. Theoretically, the attachment bond with a parent, especially with the primary caregiver, is qualitatively different than the closeness experienced with a best friend (Markiewicz et al., 2006;

Pittman et al., 2011), which may partially explain the differing associations found for parental psychological control and friend possessiveness. Further examination of the role of parental psychological control is warranted to better understand whether the features of parental psychological control that are related to psychological dating violence attitudes also are related to physical dating violence attitudes.

Interestingly, neither parental psychological control nor best friend possessiveness was associated with risky sexual behavior attitudes (neither directly nor indirectly). Given that support has been found to protect against attitudes accepting of dating violence and risky sexual behavior, and control thought to be a counter measure to support, it seemed likely that control would positively influence attitudes about risky sexual behavior. It might be that parental psychological control matters most for dating violence attitudes, given that both are addressing a similar disrespect for the recipient. This is supported by the concepts of internal working models and relational schemas. Adolescents who have experienced the use of psychological control in the parent-child relationship might be more likely to accept the use of psychological or physical violence within their dating relationship. These earlier experiences of parental psychological control inform adolescents' schemas, and these schemas inform adolescents' expectations and beliefs about future relationship interactions (Baldwin, 1992; Shaver et al., 1996). Therefore, when it comes to adolescents' beliefs about dating violence, adolescents might have learned from their parents that controlling behavior in other relationships is acceptable.

In contrast to parental psychological control, parental support may matter particularly for adolescents' beliefs about engaging in risky sexual behavior by influencing their beliefs about themselves. Sexual behavior differs from psychological dating violence in that the former is not inherently negative, but differs in acceptability and riskiness according to factors such as the age

and relationship status of the individual. Attachment theory indicates that supportive, secure relationships with parents are associated with adolescents holding positive beliefs about themselves, and beliefs that they are worthy of receiving love and support from others (Bowlby, as cited in Baldwin et al., 1996; Pittman et al., 2011). Adolescents are more likely to hold less accepting attitudes of engaging in risky sexual behavior when they believe that they are worthy of being treated positively by others, and, as young adolescents, believe they are not ready for a sexual relationship. Parental support may foster this higher self-regard.

Limitations in previous literature, as well as the limited items used in the current study, might explain why an association was not found between friend possessiveness and attitudes about risky sexual behavior. Although previous literature indicates that friend possessiveness is related to relational aggression, no studies were identified establishing an association between friend possessiveness and risky sexual behavior. Furthermore, no literature was found that examined the association between friend possessiveness and attitudes about engaging in risky relationship behaviors. It might be that an adolescent with a controlling friend is more accepting of the use of control within dating relationships, because the adolescent has already been exposed to possessive, dominant, and jealous behavior within one or more close friendships. However, having a controlling best friend may not expose adolescents to risky sexual behavior, as the focus is more on maintaining control over the adolescent through constant contact, monitoring, and questioning. This aligns with the concept of relational schema, as youth exposed to controlling behavior within friendships might hold expectations of similar behaviors within dating relationships. Therefore, adolescents with possessive friends hold more accepting attitudes about psychological dating violence, but having possessive friends may not matter for adolescents' beliefs about risky sexual behavior.

Self-esteem

As hypothesized, adolescents with higher self-esteem were less likely to be accepting of engaging in risky sexual behavior. This finding is supported by another study that indicates higher self-esteem is associated with adolescents holding positive attitudes about talking about sex (Chapman & Werner-Wilson, 2008). Few studies have examined self-esteem and dating violence; studies that found a negative relationship between self-esteem and dating violence behaviors and attitudes were within samples of older adolescents and young adults (Jones & Gardner, 2002; Salazar et al., 2004; Sharpe & Taylor, 1999). In their research that focused on an older sample of adolescents, Pflieger and Vazsonyi (2006) found that lower self-esteem was associated with more accepting attitudes about dating violence. However, in the present study self-esteem was unrelated to dating violence attitudes. Perhaps the expected association was not found among this younger sample of adolescents because their acceptance of violence within dating relationships was relatively low. Overall, most adolescents, regardless of self-esteem, did not view dating violence as acceptable. Acceptance of dating aggression might change as adolescents get older and gain more experience in dating relationships, or the association between self-esteem and dating violence might be found when examining acceptance of being mistreated by a specific relationship partner rather than beliefs about aggression in dating relationships generally. That is, an adolescent with low self-esteem might be more likely to put up with being mistreated by a dating partner but not claim to be accepting of aggression in dating relationships more generally (note. The dating aggression attitudes questions asked *"How acceptable would the following behaviors be for a person if they were really angry with their partner?"*). This notion is supported by theories of attachment and self-esteem, such that adolescents who receive less support from parents or close friends may believe that they are not

worthy of receiving support and love in future relationships (Bowlby, as cited in Baldwin et al., 1996; Cast & Burke, 2002). Holding beliefs that one does not deserve to be treated positively by others might be related to adolescents' acceptance of mistreatment within their dating relationships. Therefore, adolescents with lower self-esteem and negative feelings of self-worth might be more accepting of negative treatment within their dating relationship but not necessarily accepting of dating aggression generally.

As predicted, greater support from parents and best friends was associated with higher adolescent self-esteem and this aligns with past research (Parker & Benson, 2004; Siyez, 2008). Adolescents who feel supported by their parents and close friends likely believe that they are worthy of receiving support from others, and therefore hold positive feelings about themselves. No strength differences were found in the associations between parent and best friend support and self-esteem, suggesting that parents and best friends are equally important in their influence on adolescents' beliefs about their worth. This is supported by attachment theory, which indicates that early adolescents (when compared to older adolescents and young adults) often turn to both parents and best friends as primary sources of support (Markiewicz et al., 2006).

Also as expected, greater parental psychological control predicted lower self-esteem. Parents who control their youth through the use of guilt and threats likely instill in them a sense of reliance on others, which can transfer into relationships outside of the parent-adolescent relationship. Youth who are consistently told to feel a certain way or threatened with the loss of love from parents would be expected to feel less worthy of receiving love from their parents, or would feel that they are expected to behave or feel a certain way in order to receive love. As explained by self-esteem theory, individuals look to others to verify who they are (i.e., their identity) and self-esteem tends to be lower when others do not support one's identity (Cast &

Burke, 2002). Thus, having parents who attempt to control their youth using manipulation strategies are essentially disregarding their youth's attempts to form their own identity by telling them how to think and feel. This finding is consistent with other literature that has found self-esteem to be lower among adolescents who report greater psychological control from parents (Bean et al., 2003; Plunkett et al., 2007).

Furthermore, parent support was a stronger predictor of self-esteem than was parental psychological control. This finding is consistent with other literature examining associations among parent support, parental psychological control, and self-esteem, with slightly stronger correlations found between parent support and self-esteem than parental psychological control and self-esteem (Bean et al., 2003; Plunkett et al., 2007). In addition, parent support and parental psychological control were weakly correlated with one another in the present study (r = -.12). These parenting measures were expected to be more strongly associated with one another, as found in previous literature; however, these stronger associations were found in studies using older samples of youth (r = -.30 to -.54; Bean et al., 2003; Pittman, Kerpelman, Soto, & Adler-Baeder, 2012; Plunkett et al., 2007). The current findings suggest that parent support and parental psychological control are relatively independent in this early adolescent sample. That is, high parental support does not necessarily mean low parental psychological control or vice versa. Therefore, some of the participating early adolescents may have viewed psychologically controlling parenting behaviors as more normative or acceptable than others did, given that autonomy expectations typically are greater for older than for younger adolescents (Daddis & Smetana, 2005; Feldman & Quatman, 1988). Furthermore, early adolescents have spent most of their lives turning to parents for guidance and, therefore may interpret behaviors such as "bring up past mistakes when they criticize me" as parental attempts to help guide the adolescent in

learning how to appropriately behave. As adolescents get older and begin seeking more independence from their parents they may more uniformly begin viewing these parental behaviors as attempts to limit their autonomy through control. Thus, among older adolescents there is a stronger negative association between parent support and parental psychological control, whereas this is not as apparent among early adolescents.

Counter to expectations, best friend possessiveness was unrelated to adolescent self-esteem. One explanation for this lack of association might be adolescents' interpretation of friend jealousy and possessiveness. Although some adolescents likely interpreted the jealousy and possessiveness items as expected, that is, as negative, unhealthy relationship behaviors, others might have interpreted these behaviors as signs that their friends care about them. This aligns with Murphy and Smith's (2010) findings on jealousy and possessiveness within dating relationships. Their findings indicated that adolescent girls were unaware of the seriousness of jealous and possessive behaviors in their dating relationships and rated them as less severe than other warning signs of abusive behavior (e.g., personal put downs, social restriction). Furthermore, among adult samples, where more extensive research on jealousy and control has been conducted, studies have found some women to interpret controlling behaviors as love (Gelles, 1997). Although these studies focused on jealousy within dating relationships and not within friendships, their findings help us to think about how adolescents might also view jealousy within their close friendships. These potential differences in interpretation of friend possessiveness might partially account for failing to detect an association between possessiveness and self-esteem, risky sex attitudes, and psychological dating violence attitudes.

Gender differences

No strength differences were found by gender; however, some significant paths were found for one gender but not the other. Support from parents and best friends mattered for adolescent girls' self-esteem and beliefs about risky sex, and parental psychological control mattered for adolescent girls' beliefs about psychological dating violence. Among adolescent boys, however, parental psychological control and support were important for self-esteem, but having possessive best friends mattered for boys' beliefs about dating violence. Although there were no significant differences in the strength of associations between boys and girls, the differing patterns of findings suggest areas in which future research might help clarify whether gender differences do exist in other samples of early adolescents, or if gender differences exist only for older adolescents.

The lack of significant gender differences in the prediction of self-esteem and dating behavior attitudes might be due to the age or ethnic makeup of the sample. Previous literature that has found gender differences in these associations primarily included samples of older adolescents and young adults (Herrera, Wiersma, & Cleveland, 2008; Sharpe & Taylor, 1999) or used predominantly European American samples of middle to late adolescents (Price & Hyde, 2009; Rodgers, 1999; Spencer et al., 2002). These samples are in contrast to the more ethnically diverse, early adolescent sample used in the current study. Therefore, it might be that during early adolescence boys and girls are more similar in their beliefs and expectations with regards to dating relationships. Perhaps this is due to their limited experience and typically adult-supervised interactions with friends and potential dating partners. Also, during this time, early adolescents are just beginning to seek autonomy from parents, but it might not be until later that they begin exploring their independence more fully and perceive their parents as being more

controlling and less supportive due to the restrictions imposed as youth are spending more time with friends and less time with parents. Furthermore, as youth start exploring romantic relationships (with less parental supervision), parents might set stricter rules for their daughters than for their sons (Madsen, 2008), therefore influencing adolescents' perceptions of parental psychological control and support. Adolescents typically have a strong desire to establish friendships and to fit in with a peer group during adolescence, and the characteristics of these friendships might influence girls and boys differently. As a result, gender differences might become more salient in who (parents or best friends) and what (control or support) influences adolescents' beliefs about risky relationship behaviors.

One other possible explanation for not finding significant gender differences in the strength of associations may be due to our assessment of adolescents' attitudes about engaging in risky relationship behaviors rather than their actual behaviors. Most of the studies reviewed that identified gender differences examined adolescents' behaviors as outcomes. It might be that boys and girls behave differently in terms of engagement in early sexual behavior, not using condoms, and dating violence; however, they might report holding similar beliefs about such behaviors.

Limitations and Future Directions

As with all research, the current study was not without limitations. Some of these limitations pertain to the measures used in the current study. For example, two items were used to assess friend possessiveness. Although it is ideal to have at least three items as indicators of a construct, only two items from the secondary dataset were appropriate for measuring friend possessiveness, and therefore our assessment of this outcome was limited. A more thorough assessment of friend possessiveness might include items focused on specific behaviors such as

the frequency of the friend's attempts to contact the youth, frequency in which the friend becomes upset with youth for not spending time with them or for spending time with other friends, and whether the friend has other friends beyond the adolescent. It also would be important to include an item assessing whether the adolescent views their friend's behavior as negative or jealous behavior. Items such as these would likely produce a more comprehensive understanding of friend possessiveness through assessment of specific behaviors taking place within the friendship, as well as adolescents' perceptions of these behaviors.

Further assessment of parental psychological control would help to better understand how it operates in predicting adolescents' beliefs about physical and psychological dating violence. It may be how early adolescents interpret their parents' controlling behaviors that matters for their beliefs about physical and psychological dating violence. Therefore, it would be useful to assess adolescents' perceptions of the meaning of parental psychological control to provide some insight into whether early adolescents view these controlling parental behaviors as negatively as older adolescents do. Gaining a better understanding of how early adolescents view controlling parenting behaviors might help future researchers identify the specific facets of parental psychological control that influence each type of dating violence attitude.

Future studies might also include an assessment of physical child abuse and inter-parental aggression in addition to parental psychological control. It may be that adolescents who experience psychologically controlling behavior within the parent-child relationship also experience physical abuse in these relationships or witness physical aggression between their parents. Perhaps this would aid in elucidating the moderate correlation between adolescents' beliefs about psychological dating violence and beliefs about physical dating violence, as adolescents reporting greater parental psychological control might also have experienced or

witnessed some type of physical violence within their families, and therefore might be more accepting of both types of violence within dating relationships (Sunday et al., 2008).

Measurement of the risky dating attitudes also was limited in the current study. Future research should include a more extensive assessment of attitudes about risky sexual behavior and dating violence. In addition to assessing intentions to resist sexual pressure and waiting to have sex, it would be important to examine adolescents' beliefs about and intentions to use condoms or contraceptives, beliefs about the acceptability of the use of birth control, and beliefs about having multiple partners or engaging in sexual behavior in non-committed relationships. Also more questions about the cost and benefits of sexual activity would be valuable to assess. In regard to dating aggression, additional items might include beliefs about controlling behavior (e.g., "It would be okay if your boyfriend/girlfriend (a) regularly checked your cell phone or email (b) threatened to break up with you if you did not do what he/she asked"), as well as asking the adolescent to think specifically about themselves in the situation instead of dating violence in general (note. The dating aggression attitudes questions asked *"How acceptable would the following behaviors be for a person if they were really angry with their partner?"*). Adolescents might disagree with the use of aggression in dating relationships in general, as dating violence is inherently considered a negative, unacceptable behavior; however, thinking about how they might respond in abusive situations, and to less severe/non-physically abusive behavior, may lead to more variability in attitudes accepting of dating violence.

Although substantial literature exists that establishes an association between beliefs/attitudes and behaviors, these associations were not examined in the current study; therefore, conclusions cannot be made with regards to this association. In addition to not assessing adolescents' risky relationship behaviors in the current study, the association between

beliefs and behaviors might depend on other factors. For example, adolescence is a period in which youth are faced with many pressures that might lead them to behave in ways counter to their beliefs. This might help explain why previous associations found in the literature between parent and best friend support/control and behaviors might not be found in the present study. Further research is needed to examine how support and control from parents and close friends might influence both risky relationship behaviors and beliefs about these behaviors.

The cross-sectional design of the current study also is a limitation. Conclusions cannot be made with regards to the order of effects. Future research should include multiple time points, with at least one data collection occurring in early adolescence and one in mid- to late-adolescence. This would allow for examining change in adolescents' beliefs about risky relationship behaviors and engagement in such behaviors, as well as for greater confidence in the direction of associations. It also would be interesting to explore whether differences by gender become apparent in mid- to late-adolescence, whether early adolescents' beliefs influence their later beliefs, and whether these beliefs change as a function of their experience in dating relationships.

Finally, the current study uses self-report data from a single source. While often viewed as a limitation, in the current study this is the best way to capture what we intended to measure. That is, we are interested in adolescents' perceptions of support and control within their relationships with parents and best friends, their perceptions of their own self-esteem, and their attitudes about risky sexual behavior and dating violence. Therefore, how supportive or controlling an adolescent believes their parents or best friends to be would likely matter more for adolescents' self-esteem and risky relationship attitudes than would parent and best friend reports

of their own supportive and controlling behaviors. Thus, the use of self-report data from the adolescent provides the most appropriate assessment of each construct.

Taken together, the present study serves as an important first step in better understanding a limited area of research. Little is known about predictors of early adolescents' beliefs about engaging in risky relationship behaviors. The current study facilitates better understanding of who and what influences these beliefs. Findings in the current study indicate that parents and best friends matter in adolescents' attitudes about engaging in risky relationship behaviors. Parents and best friends also are important in predicting adolescent self-esteem which predicts adolescents' beliefs about the acceptability of engaging in risky sexual behavior. Although significant variance was explained in all outcomes, there is still substantial variance left to be explained. Future research should consider what other aspects of the parent-adolescent relationship and friendships (and other sources of input such as television, movies, and internet) might influence adolescents' beliefs about risky relationship behaviors. For example, given that the positive influences of support and self-esteem directly or indirectly predicted adolescents' beliefs about risky sexual behavior but did not influence dating violence attitudes suggests further exploration of the role of positive qualities of relationships with parents and best friends. Alternatively, it was the controlling and possessive parent and friend behaviors that most often influenced adolescents' beliefs about dating violence. Therefore, other negative parent and best friend influences may be examined as predictors of dating violence attitudes. The influence of technology also would be important to explore as it provides youth with immediate access to information on sex and violence in romantic relationships. Furthermore, youth have the ability to maintain constant contact with current and potential dating partners (Pardun, L'Engle, & Brown, 2005; Subrahmanyam & Greenfield, 2008).

One challenge in identifying potential predictors of adolescents' risky relationship behavior beliefs is that the literature in this area is limited. Although much research has examined adolescents' sexual behavior and some research assessed aggression in adolescent dating relationships, very few studies were found that looked at predictors of adolescents' beliefs about these behaviors. Literature indicates that beliefs about sex and dating violence are associated with sexual and dating violence behaviors; therefore, we should continue to turn to research on these behaviors to identify potential predictors of attitudes. For example, other studies have considered the role of parental involvement and the behaviors of close friends as influences on adolescents' risky behaviors (Day & Padilla-Walker, 2009; Doljanac & Zimmerman, 1998; Ellis et al., 2013); therefore, these may be important variables to consider in future research on beliefs and attitudes about risky relationship behaviors.

In summary, early adolescents are beginning to explore dating relationships and forming beliefs about healthy and unhealthy behaviors within these relationships. Parents and best friends are important influences on adolescents' beliefs about what behaviors are acceptable in dating relationships, and the support or control received in these relationships differentially influence adolescents' beliefs about engaging in risky sexual behavior and the acceptability of violence in dating relationships. The role of parents and best friends, as well as adolescents' self-esteem, should continue to be integral areas of focus in future studies on adolescents' risky relationship beliefs. As the role of each is clarified through subsequent studies, practitioners and educators might find these results useful in informing their programs and interventions. Until that time, the present study offers other researchers a starting point from which to further explore influences on adolescents' attitudes about engaging in risky sexual behavior and dating violence.

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APPENDIX A

Measures

Sexual Behavior Attitudes (Gardner, Giese, & Parrott, 2004)

Please indicate your agreement or disagreement with each statement below:

1 = strongly disagree 5 = strongly agree

1. It is risky for me to have sex.
2. If a boy my age has sexual intercourse, he proves he is a man.
3. In future dating relationships I plan to wait to have sex until I really feel emotionally close with my partner.
4. If a girl my age has sexual intercourse, she proves she is a woman.
5. In future dating relationships I plan to wait to have sex until after I really get to know the person I am dating.
6. In future dating relationships I plan to say "no" if I am being pressured to have sex.

Dating Violence Attitudes (Foshee, 1996)

No matter how well dating partners get along, there are times when they disagree. How acceptable would the following behaviors be for a person if they were really angry with their partner?

1 = never 2 = rarely 3 = sometimes 4 = always

1. Threatening to hurt the partner
2. Not letting the partner do things with other people
3. Insulting the partner in front of others
4. Saying things to hurt the partner's feelings on purpose
5. Slapping the partner
6. Slamming the partner against the wall

7. Hitting the partner with a fist or something else hard
8. Beating the partner up

Quality of Relationships Inventory (Pierce, Sarason, & Sarason, 1991)

Think about the parent(s) or parent-figure(s) you spend the most time with. Use the scale below to indicate how much the statement describes your relationship.

1 = not at all 2 = a little bit 3 = quite a bit 4 = very much

How comfortable are you turning to your parent (parent figure):

1. for advice about problems?
2. for help with a problem?
3. to give you honest feedback, even if you might not want to hear it?
4. to listen to you when you are very angry at someone else?
5. to distract you from your worries when you feel under stress?

Parent support to discuss relationship concerns

Think about the parent(s) or parent-figure(s) you spend the most time with.

1 = not at all 2 = a little bit 3 = quite a bit 4 = very much

How much can you turn to a parent (parent figure):

1. to discuss the questions or concerns you have about dating relationships?
2. to discuss questions you have about sex?
3. for help in dealing with a problem you are having with a friend or dating partner?

Relationship Experience Measure (Levesque, 1993)

If you are going out with someone, think about that person. If you do not currently have a dating partner, think about your closest friend as you answer the next set of questions. I am thinking about (check one person): _____My current dating partner (my boyfriend/my girlfriend)

_____My closest friend

1 = strongly disagree 5 = strongly agree

1. I have never had to lie to this person.
2. This person listens to me when I need someone to talk to.
3. I find it easy to tell this person how I feel.
4. This person helps me solve my problems.
5. This person comforts me when I need comforting.
6. This person tries to get me in a good mood when I am angry.
7. Sometimes this person does not believe I care about him/her.
8. This person is jealous of my relationships with other people.

Relationship Support

Please think about the person you currently are going with – your boyfriend or girlfriend. If you are not currently dating, think about your closest friend.

I am thinking about (check one person): ____My current dating partner ____My closest friend

1 = very little 4 = a lot

1. How much can you turn to this person for emotional support?
2. How much could you count on this person for help with a problem?

Psychological Control Scale—Youth Self-Report (PCS-YSR; Barber, 1996)

How well does each statement below describe your parent(s) or parent figure(s)?

1 = Not like them 2 = Somewhat like them 3 = A lot like them

My parents (parent figures) are people who:

1. Change the subject whenever I talk.
2. Often interrupt me.
3. Would like to be able to tell me how to feel or think about things all the time.
4. Are always trying to change how I feel or think about things.
5. Bring up past mistakes when they criticize me.

Rosenberg Self-Esteem Scale (Rosenberg, 1965; Silber & Tippett 1965)

Please answer the next questions to describe your feelings about yourself these days.

1 = strongly disagree 5 = strongly agree

1. I feel I'm a person of worth, at least on an equal basis with others.
2. I feel I have a number of good qualities.
3. I am able to do things as well as most people.
4. I take a positive attitude toward myself.
5. On the whole, I am satisfied with myself.

Demographic Questions

Please indicate your answer by willing in the blank, or checking or circling the choice that fits you best.

1. **Age:** 9 10 11 12 13 14 15 16 17 18 or older

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

3. **Race/Ethnicity:** (A) Black/African American (B) White/Caucasian
(C) Hispanic/Latino (D) Native American
(E) Asian American (F) Other: _____ (Please specify)

4. **Please circle the answers that best tell how much dating experience you have had (please circle True or False):**

(A) True False I have never gone out on a date with anyone.

APPENDIX B

Supplemental Tables

Table 1. Standardized and Unstandardized Parameter Estimates, Standard Errors, R-squares, and Fit Statistics for Sex Attitudes and Dating Violence Attitudes Regressed on Parental and Best Friend Support and Control/Possessiveness and Self-esteem using Original and Transformed Outcome Variables

	Original				Transformed			
	B	*SE B*	*β*	R^2	*B*	*SE B*	*β*	R^2
Self-esteem on				.11***				.12***
Best friend support	.09	.05	.09*		.08	.05	.09	
Best friend possessiveness	-.06	.05	-.06		-.06	.05	-.06	
Parent support	.22	.05	.24***		.22	.05	.24***	
Parental psychological control	-.18	.08	-.11*		-.24	.11	-.11*	
Sex Attitudes on				.10***				.06**
Best friend support	-.16	.04	-.17***		-.09	.03	-.13**	
Best friend possessiveness	.05	.05	.05		.02	.04	.03	
Parent support	.02	.04	.02		.01	.03	.02	
Parental psychological control	.04	.08	.02		-.03	.08	-.02	
Self-esteem	-.14	.05	-.14**		-.07	.04	-.09	

	Original				Transformed			
	B	*SE B*	*β*	R^2	*B*	*SE B*	*β*	R^2
Physical Dating Violence Attitudes on				.06**				.06**
Best friend support	-.05	.03	-.08		-.01	.01	-.08	
Best friend possessiveness	.05	.04	.07		.01	.01	.08	
Parent support	.01	.03	.01		.00	.01	.02	
Parental psychological control	.19	.06	.16**		.06	.02	.16**	
Self-esteem	-.04	.04	-.06		-.01	.01	-.07	
Psychological Dating Violence Attitudes on				.07**				.08**
Best friend support	-.06	.03	-.10*		-.02	.01	-.12*	
Best friend possessiveness	.09	.04	.13*		.02	.01	.13*	
Parent support	.03	.03	.05		.01	.01	.05	
Parental psychological control	.17	.06	.16**		.05	.02	.16**	
Self-esteem	-.03	.04	-.04		-.01	.01	-.05	

Model fit statistics (original): X^2/df =1.85, CFI=.96, TLI=.95, RMSEA=.035, *ns*; Model fit statistics (transformed): X^2/df =1.79, CFI=.96, TLI=.95, RMSEA=.033, *ns*; *p<.05; **p<.01; ***p<.001

Table 2. Delta Chi-square Test: Examination of Model Fit When Paths from Parent Support to Risky Sex Attitudes and Best Friend Support to Risky Sex Attitudes are Unconstrained and Constrained to be Equal

Model	X^2	*df*	ΔX^2	Δdf	Critical X^2 (α=.05)
Unconstrained	747.74	403			
Constrained	754.45	404	6.71	1	3.84

Table 3. Delta Chi-square Test: Examination of Model Fit When Paths from Parent Support to Physical DV Attitudes and Best Friend Support to Physical DV Attitudes are Unconstrained and Constrained to be Equal

Model	X^2	*df*	ΔX^2	Δdf	Critical X^2 (α=.05)
Unconstrained	747.74	403			
Constrained	749.24	404	1.50	1	3.84

Table 4. Delta Chi-square Test: Examination of Model Fit When Paths from Parent Support to Psychological DV Attitudes and Best Friend Support to Psychological DV Attitudes are Unconstrained and Constrained to be Equal

Model	X^2	*df*	ΔX^2	Δdf	Critical X^2 (α=.05)
Unconstrained	747.74	403			
Constrained	750.94	404	3.20	1	3.84

Table 5. Delta Chi-square Test: Paths from Parental Psychological Control to Psychological DV Attitudes and from Friend Possessiveness to Psychological DV Attitudes Unconstrained and Constrained to be Equal

Model	X^2	*df*	ΔX^2	Δdf	Critical X^2 (α=.05)
Unconstrained	446.87	274			
Constrained	448.25	275	1.38	1	3.84

Table 6. Delta Chi-square Test: Examination of Model Fit When Paths from Parent Support to Self-esteem and Parental Psychological Control to Self-esteem are Constrained to be Equal

Model	X^2	*df*	ΔX^2	Δdf	Critical X^2 (α=.05)
Unconstrained	747.74	403			
Constrained	770.54	404	22.80	1	3.84

Table 7. Test of Mediation: Examination of Model Fit When Path Between Best Friend Support and Risky Sex Attitudes is Unconstrained and Constrained to Zero

Model	X^2	*df*	ΔX^2	Δdf	Critical X^2 (α=.05)
Unconstrained	160.11	49			
Constrained	174.50	50	14.39	1	3.84

Table 8. Delta Chi-square Tests: Testing Parameter Differences Between Girls and Boys

Path constrained	X^2	*df*	ΔX^2	Δdf	Critical X^2 (α=.05)
No constraints	1299.97	810			
Best friend support to self-esteem	1300.04	811	.07	1	3.84
Parent support to self-esteem	1302.44	812	2.40	1	3.84
Best friend possessiveness to self-esteem	1303.06	813	.62	1	3.84
Parental psych control to self-esteem	1305.08	814	2.02	1	3.84
Best friend support to psychological DV attitudes	1305.47	815	.39	1	3.84
Parent support to psychological DV attitudes	1306.50	816	1.03	1	3.84
Best friend possessiveness to psychological DV attitudes	1309.14	817	2.64	1	3.84
Parent psych control to psychological DV attitudes	1309.24	818	.10	1	3.84
Self-esteem to psychological DV attitudes	1309.63	819	.39	1	3.84
Best friend support to physical DV attitudes	1310.74	820	1.11	1	3.84
Parent support to physical DV attitudes	1311.01	821	.27	1	3.84
Best friend possessiveness to physical DV attitudes	1312.20	822	1.19	1	3.84
Parental psych control to physical DV attitudes	1312.58	823	.38	1	3.84
Self-esteem to physical DV attitudes	1312.63	824	.05	1	3.84
Best friend support to risky sex attitudes	1312.63	825	.00	1	3.84

	X^2	*df*	ΔX^2	Δdf	Critical X^2 (α=.05)
Parent support to risky sex attitudes	1313.73	826	1.10	1	3.84
Best friend possessiveness to risky sex attitudes	1315.71	827	1.98	1	3.84
Parental psych control to risky sex attitudes	1316.34	828	.63	1	3.84
Self-esteem on risky sex attitudes	1318.21	829	1.87	1	3.84

Table 9. Delta Chi-square Tests: Testing Differences in Residual Variances of Outcome Variables Between Girls and Boys

Residual Variance Constrained	X^2	*df*	ΔX^2	Δdf	Critical X^2 (α=.05)
No constraints	1318.21	829			
Self-esteem	1318.60	830	.39	1	3.84
Risky sex attitudes	1319.17	831	.57	1	3.84
Physical DV attitudes	1319.50	832	.33	1	3.84
Psych DV attitudes	1319.67	833	.17	1	3.84

Table 10. Factor Loadings for Latent Variables without QRI as an Indicator of Parent Support

Factor	*B*	*SE B*	*β*
Parent Support			
Parent Support 1	1.00	.00	.84
Parent Support 2	.76	.06	.62
Parent Support 3	.92	.06	.73
Parent Psychological Control			
Parental psychological control 1	.74	.05	.64
Parental psychological control 2	1.00	.00	.74
Parental psychological control 3	.63	.07	.43
Parental psychological control 4	.94	.08	.65
Parental psychological control 5	1.01	.08	.65
Best Friend Support			
Communication Support	1.00	.00	.78
Emotional Support	1.09	.06	.88
General Support	.65	.04	.69
Best Friend Possessiveness			
Possessiveness 1	1.00	.00	.66
Possessiveness 2	1.12	.23	.76
Self-Esteem			
Self-esteem 1	1.00	.00	.67
Self-esteem 2	1.14	.06	.87
Self-esteem 3	1.03	.06	.76
Self-esteem 4	1.07	.07	.79
Self-esteem 5	.98	.06	.75
Psychological Dating Violence Attitudes			
Psychological DV attitudes 1	1.00	.00	.73
Psychological DV attitudes 2	.75	.07	.44
Psychological DV attitudes 3	1.01	.06	.74
Psychological DV attitudes 4	1.15	.06	.78
Physical Dating Violence Attitudes			
Physical DV attitudes 1	1.00	.00	.77
Physical DV attitudes 2	.99	.04	.86
Physical DV attitudes 3	1.05	.04	.91
Physical DV attitudes 4	1.03	.04	.90

All factors significantly load at $p<.001$; Model fit: $X^2/df=1.92$, CFI=.97, TLI=.96, RMSEA=.04, *ns*

Table 11. Standardized and Unstandardized Parameter Estimates, Standard Errors, R-squares, and Fit Statistics for Sex Attitudes and Dating Violence Attitudes Regressed on Parent and Best Friend Support and Control/Possessiveness and Self-esteem (without QRI as an indicator of parent support).

	B	*SE B*	*β*
Self-esteem on			
Best friend support	.10	.04	.11*
Best friend possessiveness	-.06	.05	-.06
Parent support	.18	.04	.21***
Parent psych control	-.19	.08	-.12*
Risky Sex Attitudes on			
Best friend support	-.16	.04	-.17***
Best friend possessiveness	.04	.05	.04
Parent support	.03	.04	.03
Parent psych control	.04	.08	.03
Self-esteem	-.14	.05	-.14**
Physical Dating Violence Attitudes on			
Best friend support	-.05	.03	-.08
Best friend possessiveness	.05	.04	.07
Parent support	.01	.03	.01
Parent psych control	.19	.06	.16***
Self-esteem	-.04	.04	-.06
Psychological Dating Violence			
Best friend support	-.06	.03	-.10*
Best friend possessiveness	.09	.04	.13*
Parent support	.03	.03	.04
Parent psych control	.17	.06	.16**
Self-esteem	-.03	.04	-.04
R^2			
Self-esteem	.10***		
Sex Attitudes	.10***		
Physical Dating Violence Attitudes	.06**		
Psychological Dating Violence	.07**		
Fit Statistics			
X^2/df	1.74		
CFI	.96		
TLI	.95		
RMSEA	.032, *ns*		

*p<.05; **p<.01; ***p<.001