5-2011

Predicting Dating Violence Victimization among College Women: The Role of Previous Exposure to Violence and Acceptance of Dating Violence

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Recommended Citation

Karlsson, Marie Elisabeth, "Predicting Dating Violence Victimization among College Women: The Role of Previous Exposure to Violence and Acceptance of Dating Violence" (2011). *Theses and Dissertations*. 82.
http://scholarworks.uark.edu/etd/82

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WOMEN: THE ROLE OF PREVIOUS EXPOSURE TO VIOLENCE AND
ACCEPTANCE OF DATING VIOLENCE

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Arts in Psychology

By

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May 2011
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Abstract

Dating violence is a worldwide problem (Straus, 2004). The majority of empirical

studies and conceptual models of dating violence have focused on perpetration, and

examined the impact of prior exposure, positing an intergenerational transmission model.

More recently, researchers have examined the influence of other moderating and

mediating variables and hypothesized that attitudes, such as acceptance of dating

violence, are an important variable to examine (Flynn & Graham, 2010; Lichter &

McCloskey, 2004). Focusing on victimization, this study attempted to assess the

applicability of the intergenerational hypothesis (previous exposure to violence, such as

witnessing interparental abuse and childhood abuse) as well as the impact of the

attitudinal variable of acceptance of dating violence, to determine if prior exposure or

acceptance place women at increased risk for dating violence victimization. A sample of

189 college women was recruited to respond to an online survey. The hypothesized

effect that previous exposure to any type of prior violence would predict physical

victimization in a dating relationship was not supported. Follow up analyses showed an

effect for more specific exposure, such that prior physical violence predicted physical

victimization. Similarly, acceptance of any type of dating violence was not a significant

predictor of physical victimization, while acceptance of physical violence increased the

likelihood of being a victim of physical violence, especially acceptance of female

perpetrated physical violence. Acceptance did not mediate the relation between

childhood exposure and dating violence victimization. Similar results were found for

exposure to sexual and psychological violence, acceptance, and dating violence

victimization. Lastly, there was a significant positive correlation between victimization

and perpetration indicating that most female victims of dating violence also endorse perpetration. This study is an important extension of existing research models of dating violence, adding to our understanding of the relation between acceptance of dating violence and victimization.

This thesis is approved for
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Graduate Council

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Predicting Dating Violence Victimization among College Women: The Role of Previous

Exposure to Violence and Acceptance of Dating Violence

Dating violence is recognized as a major issue in today's society, with college

students reporting rates of physical violence between 17% and 45% across 31 universities

around the world (Straus, 2004). In the 1970s, due to the women's movement, physical

violence involving intimate partners, termed domestic violence, became a more

recognizable societal problem worldwide (Tjaden, 2005). Initially domestic violence was

viewed as a criminal justice issue, but since the 1990s it is considered more of a public

health concern. Today, some people argue that it is also a human rights issue (Tjaden,

2005).

The term domestic violence was first used by researchers and grassroots activists

in order to refer to husbands who physically abused their wives. Lenore Walker (1979)

was one of the first clinical researchers to highlight this issue. More recently the term

intimate partner violence (IPV) has gained recognition as the preferred term which is

used to refer to violence between partners since it allows for the inclusion of different

types of violence (e.g., sexual and psychological) in addition to physical violence and

expands the definition to include additional types of intimate relationships besides

marriage, including dating and same sex relationships. Makepeace (1981) was the first

researcher to focus more specifically on dating violence, reporting that 21% of college

students had experienced dating violence. The focus of this study was to evaluate the

impact of prior experiences with violence and attitudes, such as acceptance of violence,

in predicting the risk of physical dating violence victimization among college women.

In general, when studying dating violence there are several different aspects that are important to consider when interpreting research findings. Three major areas of consideration are sample characteristics, types of dating violence, and types of measurements and definitional criteria. Research studies have mainly focused on either high school or college student populations (ages 13-25) and the majority of the student respondents have been Caucasian and heterosexual. Moreover, dating violence can include physical, psychological, and/or sexual violence. Even though the rates of violence reported vary across studies, researchers have found the highest rates of dating violence for psychological violence (82% for women and 87% for men; Harned, 2002) followed by sexual (76.9% for females and 67.4% for males; Jackson, Cram, & Seymour, 2000), and physical violence (47%; Katz, Kuffel, & Coblentz, 2002). Lastly, the types of measurements (as well as study-specific definitional criteria) employed in a particular study can influence the research findings. Straus, Hamby, Boney-McCoy, and Sugarman's (1996) Conflict Tactics Scale (CTS2) is the most widely used measure for assessing IPV (Jackson, 1999). Nevertheless, even when different studies employ the same measure to assess dating violence, researchers often operationalize victimization and perpetration criteria differently, which further complicates interpreting and generalizing findings across studies. One area of controversy that highlights the variability of findings across studies is the issue of the relationship between victimization and perpetration and how this may differ between the sexes.

Comparing Dating Violence in Females and Males: Perpetration and Victimization

There is an on-going debate among scholars when it comes to IPV patterns and sex differences in the high school and college dating cohorts; this pattern appears to differ

from the pattern typically reported in the adult domestic violence literature. Research has found that females are more likely to report being both victims and perpetrators of dating violence compared to males (Follingstad, Wright, Lloyd, & Sebastian, 1991; Gover, Kaukinen, & Fox, 2008; Lichter & McCloskey, 2004; Whitaker, Haileyesus, Swahn, & Saltzman, 2007). Because of this co-occurrence of victimization and perpetration roles in the high school and college samples, it is important to incorporate research on perpetration when discussing victimization.

In the adult domestic violence literature males are more likely than females to use physical violence in a relationship (Dobash, Dobash, Wilson, & Daly, 1992). However, other studies have shown that the opposite is true, with high school and college female samples reporting higher levels of perpetration (Chan & Straus, 2008; Follingstad, et al., 1991; Foo and Margolin, 1995; Gover et al., 2008; Luthra & Gidycz, 2006; Makepeace, 1986; Shook, Gerrity, Jurich, & Segrist, 2000; Straus, 2004). Moreover, some researchers report equal levels of perpetration for males and females (Bookwala, Frieze, Smith, & Ryan, 1992; Katz, et al., 2002; O'Keefe & Treister, 1998; Riggs & O'Leary, 1996). For example, Straus (2008) found that college students at 32 different universities around the world reported equal levels of perpetration between partners (67%) as the most common form of perpetration pattern of dating violence, followed by female-only perpetration (20%) and male-only perpetration (10%).

When investigating prevalence of perpetration of dating violence and sex differences, research findings indicate that it is important to consider the overall prevalence rates, the severity and the frequency of the violence, and the injury caused by the violence. In Chan and Straus's (2008) college study, women in Hong Kong and the

United States were more likely to use physical violence in dating relationships (49.3% versus 36.2% in Hong Kong and 29.9% versus 28.5% in the U.S), even though the difference was not significant in the U.S. sample. In their study, the severity of the violence did not differ between male and female perpetrators, as women reported perpetrating both severe (23.3% of females versus 16.3% of males in Hong Kong and 10.7% of females versus 7.7% of males in the U.S.) and minor (18.7% of females versus 14.5% males in Hong Kong and 20.1% of females versus 19.3% of males in the U.S.) physical violence more often than men. However, other researchers have found results contradictory to those reported in the Chan and Straus study. Foo and Margolin (1995) reported that college men perpetrated more severe violence, such as beating and threatening and using knife or weapon against partner, while women perpetrated more moderate forms of violence, such as pushing, grabbing, shoving, slapping, kicking, biting, etc.

The issue of sex differences in perpetration becomes even more complex when considering the frequency of the violence and the amount of injury caused by the violence. In Chan and Straus's (2008) study men were more likely to report a higher frequency of perpetrating physical violence compared to women (21.2% versus 16.3% in Hong Kong and 14.5% versus 7.6% in the U.S.). In this study a significant difference of perpetration rates between the sexes was found only in the U.S. sample. The researchers also found that men were more likely to frequently cause injury to their partners than were women (26% versus 5.5% in Hong Kong and 14.2% versus 6.3% in the U.S.). In another study by Straus (2004), men were also more likely to cause more severe injury to their partners compared to women. This pattern occurred at 78% of the 27 different

universities around the world that reported severe injury due to dating violence. However, earlier Makepeace (1986) found no difference between male and female perpetrators in terms of how much injury they reported causing their partners. The only exception was that males reported causing more moderate physical injury (1.4%) on their partners than females (0%). None of the students reported inflicting severe injury on their partner.

In summary, the research on perpetration rates and sex differences for the high school and college aged cohorts suggests that overall more young women report perpetrating dating violence than men. However, young men report a higher frequency of violence perpetration and cause more injury than women. Even though more women report perpetrating dating violence than men, the violence tends to be more mild forms (Teten, Ball, Valle, Noonan, & Rosenbluth, 2009). This pattern differs from the adult domestic violence literature, in which studies report violence to be more severe and perpetrators are predominantly male (Dobash et al., 1992). Therefore, it is still unclear if women or men in a college cohort are more likely to perpetrate IPV. More women than men admit to perpetrating violence, albeit acts that represent mild forms; while men cause more injury and perpetrate violence at a higher frequency.

When investigating victimization rates, research findings suggest that it is important to consider the same variables, which affect perpetration rates (e.g., overall prevalence rates; severity, injury) as studies have found sex differences in victimization rates depending on those variables. First, in terms of overall victimization rates, studies have found that women report higher levels of victimization compared to men (Follingstad et al, 1991; Gover et al., 2008; Lichter & McCloskey, 2004; Whitaker et al.,

2007), much as they endorsed greater rates of perpetration. Severity of violence experienced also differs between female and male victims, as Makepeace (1986) found that college women were more likely to report being victims of severe violence, such as being "struck by an object" and "beaten up" (p. 384), while the men were more likely to report being victims of less severe violence, such as being pushed, slapped, kicked, bit, punched, and having objects thrown at them. Likewise, in Molidor and Tolman's (1998) high school sample, a greater number of women reported being victims of more severe violence (27.1%) compared to men (16.5%), while men reported being victims of more mild to moderate violence in greater numbers (34.7%) compared to the women (23.3%). The researchers found similar results when examining the students' current or most recent relationships.

Moreover, research on victimization and injury suggests that women report more injury than men as a result of dating violence. In Makepeace's study (1986) college women who reported being victims of dating violence also reported higher rates of mild (45.4% females versus 15.7% males), moderate (5.3% females versus 2.2% males), and severe injury (2.4% females versus 0% males) as a result of the dating violence compared to men. Similarly, Molidor and Tolman (1998) reported that women were more likely to report that the violence caused them harm (47.8% females versus 3.8% males) and physical injury (33.6% females versus 4.8% males) compared to the men.

In summary, research on victimization and sex differences indicates that young women are more likely to report being victims of dating violence, report more severe violence, and more injury compared to men. This is consistent with both the dating violence literature and the domestic violence literature that report that women are more

likely to be victims of IPV and report more injury compared to men. Moreover, college women are more likely to report being both victims and perpetrators of dating violence and some studies report that dating violence tends to be bidirectional; therefore, it is also important to consider relationships where partners are mutually combative, both perpetrators and victims, when discussing victimization and perpetration rates.

Researchers have found sex differences in prevalence rates when considering bi-directionality of dating violence. As mentioned earlier, Straus (2008) found that mutually combative dating violence is the most common form of perpetration pattern reported by college students. He also found that most of the severe violence was reported in relationships where people reported being both perpetrators and victims of dating violence.

The frequency of the violence and the amount of injury caused by the violence further distinguish bidirectional from unidirectional violent relationships. In one study with middle school and high school students, adolescents who were currently in or had been in mutually abusive relationships reported a higher frequency of violence, both victimization and perpetration, compared to adolescents who reported only victimization or perpetration experiences (Gray & Foshee, 1997). Moreover, researchers have found that adolescent females and males report higher levels of injury in relationships where both partners are mutually abusive (Gray & Foshee, 1997; Whitaker et al., 2007).

The discrepancy in victimization and perpetration rates can be influenced by several factors. Perpetration rates seem, in part, to be dependent on whether researchers focus on acts of violence versus consequences of violence. Archer's (2000) meta-analysis examined sex differences and dating violence; Archer concluded that "when

measures were based on specific acts, women were significantly more likely than men to have used physical aggression toward their partners and to have used it more frequently" (p. 664). However, "when measures were based on the physical consequences of aggression (visible injuries or injuries requiring medical treatment), men were more likely than women to have injured their partners" (p. 664). Nevertheless, the effect sizes found in the meta-analysis were small (d ranged from .05 to .15).

There are several additional factors that might contribute to the contradictory findings in regards to perpetration and victimization rates among men and women. One such factor is self-defense, and many researchers have argued that women are more likely to use violence as a means of self-defense. Self-defense could be a factor which contributes to the finding of women reporting higher or equal levels of perpetration compared to men (Makepeace, 1986; Molidor & Tolman, 1998). Makepeace (1986) found that women were more likely to report using violence in self-defense compared to males, who were more likely to report using it to intimidate their partners. Furthermore, he found that more women than men reported perpetrating violence with the intent to physically harm their partner, which he interpreted being related to women using violence in self-defense. In fact Makepeace found that 70% of the women who reported perpetrating violence to physically hurt their partners also reported that they perpetrated the violence in self-defense. Likewise, Molidor and Tolman (1998) found that girls from their high school sample more often reported that they "fought back" (35.9%) compared to the boys (12.8%) (p. 186). In their study, both boys and girls reported that the boys were more likely to initiate the violence (i.e., 70% of the girls versus 27% of the boys stated their partner initiated the abuse). O'Keefe and Treister (1998) also found that high

school males and females both reported that males were more likely than females to initiate violence; however, 41% of the females and 48% of the males reported that both partners were responsible for initiating the violence. Moreover, it is sometimes unclear how participants interpret initiation of violence. It can be interpreted as who hit first, who provoked the other partner first, or who started a verbal argument.

Another factor to consider in determining true rates of partner abuse is that males might not want to report being perpetrators of dating violence since male-to-female violence is less accepted than female-to-male violence within society (Forbes, Jobe, White, Bloesch, & Adams-Curtis, 2005; Merten, 2008; O'Keefe & Treister, 1998). Because male-to-female perpetration is less acceptable, men might not want to identify themselves with something that is undesirable by society. There is evidence that men underreport domestic violence perpetration (Dutton & Nicholls, 2005). Furthermore, some studies have found that women report higher levels of perpetration and victimization (Follingstad et al, 1991; Gover et al., 2008; Whitaker et al., 2007), which indicates that women might be more willing to report violence in general compared to men.

Johnson (2005; Kelly & Johnson, 2008) suggests that the sex differences in victimization and perpetration rates can be explained if researchers consider type of violence. He proposes three types of violence: intimate terrorism, violent resistance, and situational couple violence. According to Johnson, *intimate terrorism*, also referred to as coercive controlling violence, is the most severe type of violence and is predominately perpetrated by men; it is oftentimes the type of IPV found in police records, courtrooms, domestic violence shelters, and medical centers. Intimate terrorism is based on the model

of the power and control wheel, that explains how abusers use violence to control and have power over their partners (Domestic Abuse Intervention Project). By contrast, *violent resistance* is the response to intimate terrorism and is typically perpetrated by female victims in response to their partners' violence. Lastly, *situational couple violence*, the most common type of violence encountered among intimate partners, typically results in less severe violence. Situational couple violence is mostly seen in dating relationships among adolescents and young adults and is not based on the power and control wheel causal model of IPV. Males and females tend to report equal levels of perpetration and victimization for situational couple violence. By focusing on the intent of the violence instead of the acts of violence, Johnson's typology of relationship violence may partly explain the gender discrepancy reported in perpetration levels.

In order to better understand young adults' experiences with dating violence, and because of the previously discussed sex differences in perpetration and victimization rates, this study will focus on female victims in an attempt to more clearly explain one aspect of this complex experience. For this study, dating violence will be defined as physical violence that has occurred in the past year in a heterosexual dating relationship. This study is explicitly interested in situational couples violence among college students as defined by Johnson (2005; Kelly & Johnson, 2008). The current study tried to predict female victimization, but before discussing predictor variables, it is important to understand the negative outcomes of experiencing dating violence. The high prevalence rates of dating violence in combination with the high rates of injury from the violence among high school and college students raise a concern about the potential consequences of the violence both short- and long-term. Few studies have followed adolescents and

college students into adulthood to investigate the effects of dating violence, and little is known about how experiences of dating violence affect later functioning. However, several studies have reported the negative effects of IPV on both physical and mental health among adults (Campbell, 2002; Coker et al., 2002; Plichta, 2004; Tjaden & Thoennes, 2000).

Negative Outcomes of Dating Violence

In contrast to the adult IPV literature, few studies have looked at outcomes of dating violence among adolescents and young adults (Teten et al., 2009). Amar and Gennaro (2005) compared victims and non-victims of dating violence in terms of mental health symptoms and physical injury with a college sample of females. They found that victims reported more mental health symptoms, a higher level of psychological distress, and a greater risk for developing a psychiatric disorder compared to non-victims. Most of the victims reported less severe injuries (89%), such as bruises, scratches, bite marks, and lacerations, and about 40% of the injured victims did seek healthcare due to their injuries. Moreover, the females who were victims of more than one incident of dating violence reported higher mental health scores (endorsed more mental health symptoms), greater psychological distress, a heightened risk for psychiatric disorders, and more injuries compared to single-incident victims.

However there is some evidence that outcome for victims of dating violence is variable. One variable affecting victim outcome is victim sex. A study of college dating violence sampling both male and female college students found that female college students reported feeling scared or anxious, emotionally hurt, and had a need to escape when reporting physical violence victimization (Follingstad et al., 1991). While male

victims also reported negative effects of dating violence, female victims reported "significantly more negative effects" (p. 56).

Furthermore, a sample of college students showed that men and women reported equal levels of depression, anxiety, and posttraumatic stress symptoms related to being victims of physical and psychological violence (Harned, 2002). However, males reported a stable level of positive affect unaffected by frequency of violence while females' ratings of positive affect decreased as the frequency of the violence increased. Females reported higher levels of positive affect at low frequency compared to males. Because the females' ratings of positive affect decreased with an increase in frequency, both males and females reported equal levels of positive affect at the higher frequency of violence.

Studies using high school samples have found results similar to those of Follingstad's et al. (1991) college sample. O'Keefe and Treister (1998) found that females reported "feeling emotionally hurt and fearful" because of the dating violence while males reported that "they thought it was funny" or they "felt angry" (p. 211). In another high school sample, males "were significantly more likely to report little or no physical consequences of the violence they experienced," while nearly half the females "reported serious harm" and one third of the females reported physical injury (Molidor & Tolman, 1998, p. 186). Female students were also more likely to report that their relationships had worsened and they were more likely to end their violent relationships, while male students were more likely to report that their relationships had improved following the violence.

Moreover, in addition to considering the sex differences in terms of negative effects of dating violence victimization, there is also some evidence for a more severe

negative impact when multiple types of violence were experienced. Katz, Moore, and May (2008) compared the effects of experiencing both physical and sexual violence versus one or the other in a sample of college women. They reported that women who experienced both physical and sexual abuse in their relationships reported "significantly less satisfaction, more arguing, and more psychological aggression" than women who experienced physical or sexual violence (p. 969).

There are also some findings indicating that perpetrators seem to understand the negative outcomes the violence has on their partner (Follingstad et al., 1991). Arguably especially the male perpetrators seem to understand the negative outcomes of the violence, as they reported that the violence they perpetrated "caused fear and anxiety, sadness and depression, and a feeling in their female victims that they wanted to get away to protect themselves" (Follingstad et al., 1991, p. 53). Female perpetrators, however, reported that their victimized partners were likely to justify and feel guilty about the females' violent behavior.

Overall, there are numerous negative outcomes related to dating violence. However, the answer to the question of why violence occurs in an intimate relationship remains unclear. One possibility that researchers have suggested is that attitudes and acceptance of IPV may in part explain why dating violence occurs, as some studies have found a relation between acceptance of violence and negative outcomes. Kaura and Lohman (2007) investigated how college students' acceptance of violence influenced their relationship satisfaction as well as mental health. They found that mental health and relationship satisfaction were affected by dating violence for both men and women. The women reported significantly more mental health symptoms (e.g., depression, anxiety,

and somatization) compared to the men. The findings of the study showed that women who were victims of dating violence and were more accepting of men using violence in a relationship were also more satisfied in their relationships than women who were victims but were not as accepting of dating violence. Men who were victims of dating violence reported less mental health problems if they were accepting of women using violence in a relationship compared to men who were less accepting of dating violence. Acceptance of male-to-female violence did not moderate the relationship between victimization and mental health problems for women.

Kaura and Lohman's (2007) findings suggest that greater acceptance of dating violence could protect people from the negative effects of the violence. However, it is unclear why some people are more accepting of dating violence than others. It is possible that previous exposure to partner violence, such as witnessing interparental violence or previous experiences of dating violence, might normalize the violence. The normalization of dating violence might result in young adults being more likely to experience violence in their relationships.

Since research has reported negative outcomes of IPV, more research is needed to understand young adults' perceptions of dating violence and how that relates to their experiences of the violence. Due to the lack of research in this area, the current study focused on female college students' attitudes, especially acceptance, of dating violence and how acceptance affects conflicts in their relationships. Consequently it is important to understand how acceptance of dating violence is related to young adults' experiences of relationship violence in general. Even though the focus of this study is victimization, perceptions of both victimization and perpetration will be included in the discussion to

provide a broader idea of how attitudes and acceptance of both dimensions of dating violence are related to victimization experiences.

Attitudes and Acceptance of Dating Violence

In general, research has found that women tend to be less accepting of dating violence than men (Bookwala et al., 1992; Cauffman, Feldman, Jensen, & Arnett, 2000; Forbes et al., 2005; Josephson & Proulx, 2008; Kaura & Lohman, 2007; Merten, 2008; O'Keefe & Treister, 1998; Price & Byers, 1999). There is also a trend for high school and college students to be more accepting of women using violence against a partner than men using violence against a partner (Cauffman et al., 2000; Forbes et al., 2005; Merten, 2008; O'Keefe & Treister, 1998; Price & Byers, 1999). Moreover, Price and Byers' (1999) cross-sectional study with 823 high school students reported differences in acceptance rates depending on type of violence and sex of perpetrator. Sexual violence was rated as least acceptable independent of perpetrator's sex. When females were perpetrators, the students rated physical violence as more acceptable than psychological violence. When males were perpetrators, the students were more accepting of psychological violence compared to physical violence.

Furthermore, there is some evidence that adolescents and young adults are more accepting of dating violence if they report being perpetrators and/or victims themselves. Price and Byers (1999) found that students were more accepting of a specific type of dating violence if they also reported perpetrating that type of violence. In other words, students who reported that they had perpetrated physical dating violence were also more accepting of physical dating violence. This was true for both women and men as women perpetrators were more accepting of female-to-male specific violence and vice versa.

However, the correlation between female sexual perpetration and acceptance of female-to-male sexual violence was not significant because of the low number of female sexual perpetrators. Moreover, perpetrators were also more accepting of at least one additional type of violence, with sexual violence being the least common one.

Additional studies also suggest that acceptance of violence is associated with victimization and perpetration. In Gray and Foshee's (1997) cross-sectional study, they found that adolescents who reported being both victims and perpetrators of dating violence were more accepting of dating violence compared to students who reported being only victims. They found no difference in acceptance levels when comparing those who were both victims and perpetrators of dating violence and those who were only perpetrators. These findings were based on a subsample of 77 students (out of a total of 185) who reported dating violence exposure. In Josephson and Proulx's (2008) cross-sectional study with 290 adolescents, they found that the students' acceptance of dating violence was related to an increased risk of being perpetrators of physical and psychological violence. Moreover, a greater acceptance of female-to-male violence was related to an increased likelihood of perpetrating physical violence for both females and males. However, the direct relationship between acceptance of male-to-female violence and perpetration was not significant for either sex. There was evidence for an indirect effect as acceptance of male-to-female violence increased the risk for perpetrating psychological violence, which increased the risk for perpetrating physical violence. This was true for both males and females. The researchers did not include victimization in their study.

O'Keefe (1998) compared 232 high school students who had witnessed high levels of interparental violence as children (i.e., at or above the 75th percentile) and been involved in violent relationships to those who had not been in violent relationships. Acceptance of dating violence predicted dating violence victimization and perpetration for males but not for females. Malik, Sorenson, and Aneshensel (1997) recruited 719 high school males and females who participated in group-administered surveys. They found that acceptance of using "verbal, physical, or weapon-related violence" increased the odds of being a perpetrator and victim of physical dating violence, with higher odds for perpetration (2.33) than victimization (1.42; p. 294). Another cross-sectional study with 290 males and females college students found that acceptance of physical perpetration predicted perpetration for both males and females (Foo & Margolin, 1995). The acceptance measure was related to acceptance of using violence in self-defense or because of a humiliating situation, with only the latter predicting physical perpetration. Victimization was not included in their study.

In another high school sample of 1,013 adolescents, the researchers administered surveys at baseline and 1-year after prevention program targeting dating violence (Foshee, Linder, MacDougall, & Bangdiwala, 2001). Participants were randomly assigned to prevention program or control group. The researchers controlled for experiment condition when determining risk factors for perpetration of physical violence both cross-sectional (i.e., at baseline) and longitudinal (i.e., 1 year follow up). At baseline, both males and females were more likely to report being perpetrators if they had friends who were perpetrators. Females were also more likely to perpetrate violence if they had been in physical fights with female friends and if they were more accepting of

physical dating violence. At the 1-year follow-up, the only significant predictors were having friends who were victims (for female perpetration) and acceptance of physical dating violence (for male perpetration). Lichter and McCloskey (2004) also used a longitudinal design to investigate predictors of physical and sexual dating violence perpetration and victimization among male and female adolescents. The 208 adolescents who participated in the study were interviewed twice approximately 8 years apart. Acceptance of male-to-female dating violence was a significant predictor for perpetration but not victimization.

Moreover, certain characteristics of the victim and the perpetrator as well as the situation influence acceptance ratings. Findings from one study showed that college students who read vignettes about dating violence were more likely to blame the victim more and the perpetrator less when the victim "was verbally aggressive prior to the violence compared to when she was not" (Witte, Schroeder, & Lohr, 2006, p. 662). College students also report higher acceptance of violence when it is used in self-defense (Cauffman et al., 2000; Foo & Margolin, 1995). Cauffman and colleagues (2000) found that college students were more accepting of violence when used in self-defense, to be playful, and as revenge. Overall, research has shown that perpetration is more likely to be justified in situations where victims are perceived as provoking their partners and when the violence is based on retaliation or playfulness (e.g., "how acceptable is it if Paul was just being playful and it went too far," p. 670).

Research on common beliefs about dating violence can further inform how adolescents and college students' attitudes relate to their victimization and perpetration. Few studies have investigated attitudes of dating violence from the victims' point of

view. The following studies suggest that victims tend to report jealousy, control, and retaliation as common motivations for the violence. In O'Keefe and Treister's (1998) cross-sectional study of 939 high school students, women reported jealousy and anger as the most common motivations for violence while men reported jealousy and retaliation as the most frequent motivations. Moreover, in Molidor and Tolman's (1998) cross-sectional study of 635 high school students' IPV, both genders reported jealousy as a reason for violence; however, males were more likely to report being victimized because their partners were jealous of their interactions with the opposite sex (49% of males versus 25% of females) as well as because the males themselves were jealous regarding their partners' interactions with the opposite sex (21% of males versus 10% of females).

Another cross-sectional study on victimization reported that, among a college sample of primarily freshmen students (n = 495), female victims of physical violence believed their partner used violence to gain control over them or to strike back as a response to the women hitting first (Follingstad et al., 1991). Male victims, on the other hand, thought their partner used violence to express their anger or to show that they felt "emotionally hurt or mistreated" (p. 53). Both women and men reported the strongest motive for their partner's use of physical violence was "to get control or get their own way"; this was followed by, "retaliation for being emotionally hurt", jealousy, or "to show how angry they were" (p. 53).

Most studies of attitudes about dating violence have focused on perpetration. Follingstad and collaborators (1991) found that female perpetrators reported using physical violence as a response to feeling emotionally hurt or wanting to express their anger, and male perpetrators reported using physical violence in response to the woman

hitting first or because of jealousy. Both genders reported their strongest motive for using violence to be "feeling emotionally hurt or mistreated" or "a way of expressing anger" (p. 53). In a later study, Follingstad, Bradley, Laughlin, and Burke (1999) found the largest effect sizes for the variable of "efforts to control partner," followed by jealousy when asking college students for the main reasons they had perpetrated physical dating violence (p. 371). The researchers also reported that male perpetrators had more issues with alcohol use and with controlling their anger compared to female perpetrators. The researcher used a stratified sampling method to recruit 617 students who represented the general student population (by race and sex) for their cross-sectional study.

In another college sample of 493 women the participants were asked an open-ended question regarding why they had perpetrated violence against their partners (Hettrich & O'Leary, 2007). The 11 most common responses in this cross-sectional study were: anger (the most common response), escalation of verbal argument, frustration, emotionally hurt, retaliation, poor communication, to show seriousness, external act by the boyfriend, boyfriend lied, externally cued, and preventing boyfriend from leaving argument (least common).

Moreover, Foshee, Bauman, Linder, Rice, and Wilcher (2007) interviewed 116 adolescents about their dating violence experiences as part of an evaluation of a dating violence prevention program in which participants were randomly assigned to prevention or control group. Foshee and colleagues found different patterns of perpetration among males and females, excluding adolescents who reported dating violence that was accidental or seen as playful. The researchers reported four female perpetration types, with both the most common type and the least common type reporting perpetrating

violence as a response to their boyfriends' perpetration. The first type of female

perpetrators reported being victims of ongoing violence from their boyfriends while the

fourth type reported experiencing it for the first time. Both types described self-defense

as one motive for the violence in addition to the first type reporting being "fed up" and

the fourth type reporting retaliation as a motive (p. 506). The second and the third type

of female perpetrators also reported similar reasons for perpetrating violence, which were

mostly connected to infidelity or jealousy. However, the second most common type of

female perpetrator reported anger as the main motive, while the third most common type

reported wanting to let their boyfriends know they had done something wrong. The

researchers were only able to find one male perpetrator type, which was described as

using violence to prevent their girlfriends' perpetration from escalating. Moreover, the

majority of the males reported that their girlfriends' use of violence was a response to

them finding out the boyfriends had cheated on them or because of jealousy.

Some researchers have speculated on whether men and women could have

different reasons for using violence in a relationship. Again the focus of the studies is on

perpetration as most researchers are trying to understand why adolescents and college

students would perpetrate violence against a partner. Gover and colleagues (2008) argue

in their discussion of their empirical study that women might be more likely to use

violence in relationships because of the lower level of commitment in college dating

relationships, which creates jealousy and frustration and might result in violence. Katz

and collaborators (2002) speculate in the discussion section of their empirical study that

gender roles can influence when college women and men use violence. Since women are

socialized to be more emotional and to have closeness to people they might be more

likely to perpetrate violence when they feel like their partner is being passive or withdrawing (Katz et al., 2002). Men on the other hand are socialized to be very independent and therefore they might be perpetrating violence when their partners are criticizing them or they are demanding (Katz et al., 2002). However, neither Gover and colleagues nor Katz and collaborators explicitly tested their ideas in their current studies.

In summary, research has shown that dating violence is a major societal concern based on the high prevalence rates (Harned, 2002; Jackson et al., 2000; Katz et al., 2002) and multiple negative physical and psychological consequences (Amar & Gennaro, 2005; Follingstad et al., 1991; Harned, 2002; Molidor & Tolman, 1998; O'Keefe & Treister, 1998). Moreover, dating violence appears to be related to attitudes and acceptance of IPV, which is of major focus in this study. Few theories have been developed which predict or explain why dating violence occur, but the following section will discuss two theories that are relevant for this study.

Theories of Dating Violence

Most theories of the etiology of dating violence focus on predicting perpetration. This project focused on predicting victimization risk, recognizing the lack of research in this area. More specifically, this study attempted to add to our understanding of how attitudes, such as acceptance, of dating violence, can contribute to women's vulnerability to or put them at greater risk for victimization. Even though few theories or models exist regarding dating violence, and most of them are focused on perpetration, they can provide a framework for understanding risk factors for dating violence in general.

One of the explanatory theories for dating violence is the intergenerational transmission of violence theory, which is based on Bandura's social learning theory

(1977). The intergenerational transmission of violence theory suggests that people who are abused and/or witnessed abuse as children are more likely to become victims and/or perpetrators as adults than children who have not been exposed to violence. Both vicarious (e.g., learning to be violent by observing others) and instrumental learning (e.g., learning to be violent by the consequences that follows) are assumed to play a role. Multiple studies of high school and college students have offered empirical support for this theory.

Gover and colleagues (2008) distributed surveys to groups of college students (total of 2,541 men and women). They found that women who had been physically abused as children were more likely to become victims of both physical and psychological dating violence than the non-abused college students. For males, they were only more likely to be victims of psychological violence if they had been physically abused as children. Women who reported witnessing their fathers abuse their mothers were more likely to be victims of physical dating violence. Witnessing interparental abuse did not predict dating violence vicitmization for males. Gover and colleagues also found that both male and female college students who had been physically abused as children were more likely to perpetrate physical violence in relationships than students with no abuse history. Women were also more likely to perpetrate psychological violence if they had been physically abused as children. Witnessing interparental abuse did not predict psychological dating violence victimization or perpetration.

Another cross-sectional study focused on 232 high school students who had witnessed high levels of interparental violence as children (O'Keefe, 1998). Even though O'Keefe excluded students who had not witnessed parental violence or had witnessed

lower levels of violence from participating in her study, her findings give some insight to risk factors as well as protective factors for adolescents who witnessed interparental abuse as children. She found that school performance was a protective factor for females and self-esteem was a protective factor for males. Even though they had witnessed parental violence as children, females who did well in school were less likely to perpetrate and be victims of dating violence and males with higher self-esteem were less likely to perpetrate violence. O'Keefe also found that for females being abused as children increased the likelihood for them to report being both victims and perpetrators of dating violence. Males who were or had been in violent dating relationships were more likely to be of lower socioeconomic status and be more accepting of dating violence than those who had not experienced dating violence. Moreover, both male and female perpetrators were more likely to have been exposed to community and school violence. In another high school sample of 719 males and females, they found that both males and females were more likely to perpetrate physical violence if they had witnessed their mother abuse their father, but the opposite was not a significant predictor (Malik et al., 1997). Moreover, they were more likely to be victims of physical violence if they reported being victims of child physical abuse.

Similar results were found in two different college student samples. Foo and Margolin's (1995) cross-sectional study with 290 college males and females showed that witnessing interparental abuse predicted physical perpetration for males while child sexual abuse predicted physical perpetration for females. Another cross-sectional study found that students were more likely to be victims of dating violence if they had witnessed both parents abuse each other (Jankowski, Leitenberg, Henning, & Coffey,

1999). This was not supported for those witnessing one of their parents abuse the other (either same sex parent or opposite sex parent). The authors argue that this finding might be more related to acceptance of violence (attitudinal influence) than parental modeling of violence. The students were more likely to perpetrate violence in relationships if they had witnessed the same sex parent abusing their partner or both parents abusing each other. The effect was strongest for witnessing the same sex parent abusing their partner. There was no effect for witnessing the opposite sex parent abusing their partner predicting perpetration. The researchers recruited 1,576 college students (women and men) for their study.

A cross-sectional study by Hendy and colleagues (2003) found that the greater the number of role models of violence that college students had been exposed to in their lives the more likely they were to be victims and perpetrators of dating violence. They recruited 608 men and women who were in heterosexual dating relationships. The predictor variables in the model included in this study were two types of interparental violence (mother abusing father and/or father abusing mother), two types of childhood abuse (being abused by father and/or mother), one type of past relationship violence (being victimized by past partners), and two types of current relationship violence (victimization and perpetration). Hendy et al. found that those who reported being abused by their mothers as children were more likely to be victims of dating violence. Females were also more likely to be victims if they had witnessed their mother abuse their father and males were more likely to be victims if they had been victims in past relationships. Being victimized by a current partner was only relevant for predicting perpetration of violence. Both males and females were more likely to perpetrate violence

if their current partners were violent. For females, witnessing their mother abusing their father increased the likelihood of them perpetrating violence against their partners. For males, past abuse from their mothers and previous partners also predicted perpetration.

An extension to the intergenerational transmission of violence theory is the background-situational model (Riggs & O'Leary, 1989, 1996), which is based on social learning theory and conflict theory. Bandura's (1977) social learning theory states that violence is learned through observations and imitations (e.g., instrumental or vicarious learning); these behaviors are then reinforced by different factors. Conflict theory, on the other hand, "assumes that conflict is an inevitable part of human association, whereas violence as a tactic to deal with conflict is not" (Straus et al., 1996, p. 284).

The background-situational model includes contextual and situational factors that are related to dating violence. The background or contextual factors include: models of aggression in intimate relationships, parental aggression toward the child, acceptance of aggression as an appropriate response to conflict, frustration, or threat, and prior use of aggression (Riggs & O'Leary, 1989). The situational factors include: the expectation of a positive outcome of the aggression, the partner's use of aggression, and relationship conflict (Riggs & O'Leary, 1989). The contextual factors are more distal while the situational are more proximal (O'Keefe & Treister, 1998). According to Riggs and O'Leary (1989, 1996), people's early experiences of violence make them more likely to accept violence and later use it in different situations, especially in intimate relationships. The contextual factors predict who will be violent and the situational factors predict when or in what situations someone will be violent (Riggs & O'Leary, 1989).

In Luthra and Gidycz's (2006) study, where the background-situational model was used to predict perpetration, they further emphasize that, according to the model, "attitudinal acceptance of aggression increases the likelihood that one will behave aggressively, both in general relationships and in dating relationships" (p. 719). Also, past aggressive behaviors towards partners and non-partners predict future use of violence.

Riggs and O'Leary (1996) tested their model of dating violence perpetration by using a sample of 375 college students who were all currently involved in a heterosexual dating relationship. The researchers included four contextual/background variables (interparental violence, childhood abuse, acceptance of relationship violence, and previous violent behavior) and one situational variable (relationship conflict) to predict physical and psychological/verbal dating violence. The situational factor in their study consisted of two questions that they combined into one variable. The questions were related to number of arguments in the past month and frequency of conflict. The researchers decided to only include relationship conflict as a situational factor because they believe that it is very central to their model and that the background factors they included, especially acceptance of violence, increases the likelihood of IPV. They used a structural equation analysis to test their hypothesized model.

Riggs and O'Leary (1996) found that their model was better at predicting perpetration of dating violence by males than by females, as it explained 62% of the variance for men but only 32% for women. Females and males who witnessed their parents abuse each other were more likely to report being victims of childhood abuse. Being a victim of childhood abuse predicted aggressive behavior such as arguing and

fighting with peers for both genders, while witnessing interparental abuse predicted aggression against peers and acceptance of violence only for females. Childhood abuse did not predict acceptance of violence for either sex. Moreover, acceptance of violence predicted perpetration of dating violence for both females and males, as did previous violent behavior against peers. Acceptance did not predict relationship conflict but previous violent behavior did for both genders. Finally, relationship conflict predicted perpetration of dating violence for males and females.

Riggs and O'Leary's (1996) model was better at predicting male perpetration than female perpetration. They suggested this might be because they did not examine the variable of partner's use of aggression, which they hypothesized might be a better predictor for women than men. Findings from the Luthra and Gidycz's (2006) study independently supported this idea even though they did not specifically aim to test that idea. In their perpetration study with 200 college students, they included the same contextual factors as Riggs and O'Leary (1996) except for separating previous violent behavior into physical and verbal fighting (Riggs and O'Leary combined the two). However, compared to Riggs and O'Leary's one situational factor (relationship conflict), Luthra and Gidycz included three situational factors (substance use, dating violence victimization, and problem-solving skills) in their study. The data was analyzed separately for men and women using a logistic regression analysis; only predictor variables that were significantly correlated with perpetration were included in the final model.

Overall, Luthra and Gidycz' model was better at predicting female perpetration than male perpetration, as they found that their model explained 83.3% of the female

perpetrators' behavior but only 30% of the male perpetrators' behavior. In their study, they also found that among the five factors that predicted female perpetration "the single largest predictor…was a partner's use of aggression" (p. 725). The other significant predictors for female perpetration were alcohol use, being abused by father, neglecting conflictual situations, and ending the relationship to resolve conflict. The model for predicting male perpetration included three factors which were alcohol use, longer relationships, and being victims of dating violence in their current relationship. Other researchers have also found that having a violent partner increases the likelihood for perpetration. Hendy and colleagues (2003) found that both females and males are more likely to perpetrate violence if their partner is violent.

Since there are few theories of dating violence and most of them focus on perpetration, some researchers have used perpetration risk theories to predict victimization risk. O'Keefe and Treister (1998) were interested in using the background-situational model to predict victimization. The researchers used a sample of 939 high school students, a majority of which were Latino and of low socioeconomic status. Six contextual factors were evaluated as predictors of victimization, including the same three as both previously mentioned perpetration studies used (childhood abuse, interparental violence, acceptance of violence). O'Keefe and Treister also evaluated three additional contextual factors (exposure to community and school violence, interpersonal control, and self-esteem). Moreover, they included a total of six situational factors (perpetration of dating violence, relationship conflict, relationship commitment, relationship satisfaction, length of time dating, and number of dating partners).

O'Keefe and Treister (1998) used multiple regression analyses to determine which factors predicted victimization. They found that high school females and males were both more likely to be victims of dating violence if they also had perpetrated dating violence. Furthermore, women were more likely to be victims if they were accepting of male-to-female violence, had been in more dating relationships, had lower self-esteem, reported less interpersonal control, and had more exposure to community and school violence. They were also more likely to report being victims of dating violence if their relationships had high levels of conflict, were less satisfying, and more committed. For the women, the model explained 55% of the variance. The only variable that predicted victimization among males was their perpetration of violence; male perpetration explained 44% of the variance.

When testing the background-situational model, Luthra and Gidycz's model was better at predicting female than male perpetration. Their model included partner's use of violence, which was the strongest predictor for perpetration among females. Other studies support that dating violence tends to be bidirectional (Bookwala et al., 1992; Harned, 2002; Katz et al., 2002; O'Keefe & Treister, 1998; Riggs & O'Leary, 1996). The victimization study (O'Keefe & Treister, 1998) also found support for bidirectionality, as they reported that partners' use of violence was the main predictor of victimization for females.

The two perpetration studies (Luthra & Gidycz, 2006; Riggs & O'Leary, 1996) found some evidence that exposure to violence as a child predicts later aggression, especially for females; however, this was not supported in the victimization study (O'Keefe & Treister, 1998). Acceptance of relationship violence predicted perpetration

for both females and males and witnessing interparental abuse predicted acceptance of violence for females but not for males (Riggs & O'Leary, 1996). O'Keefe and Treister (1998) found that acceptance of male-to-female violence predicted victimization among females.

Rationale for Current Study

In summary, according to the intergenerational transmission of violence theory, early experiences with violence can lead to victimization and perpetration of dating violence later in life; this finding has been supported by research (Gover et al., 2008; Jankowski et al., 1999; O'Keefe, 1998). In the background-situational model, Riggs and O'Leary (1989, 1996), while including early exposure to violence as an important factor in their model, expand the model to include more background factors, as well as specific situational factors, that can further predict risk of dating violence. By including both distal and proximal factors in their model, they hypothesized that several background factors can predict who will be violent and that certain situational factors can further predict when someone will perpetrate violence. Riggs and O'Leary state that previous experiences with violence can make people more accepting of violence, which can subsequently lead to perpetration or victimization of dating violence.

Even though other studies have investigated previous exposure of violence and acceptance as contextual factors (Luthra & Gidycz, 2006; O'Keefe & Treister, 1998; Riggs & O'Leary, 1996) none of them have investigated the additional predictive value of acceptance after accounting for exposure. Previous exposure to violence might put college students at risk for becoming victims of dating violence. Potentially they have

become tolerant of the violence and believe that it is a normal way of handling relationship conflict.

Some researchers have emphasized the need to understand people's perception of dating violence (Flynn & Graham, 2010; Lichter & McCloskey, 2004); however, current findings on perceptions as they relate to victimization are limited. Therefore, by focusing on women only, this study attempted to clarify how attitudes regarding acceptance of IPV predicted victimization. Many models, including the background-situational model, were developed to predict IPV perpetration. By using variables from the background-situational model to predict female victimization risk, this study aimed at understanding how women who have been exposed to violence might hold attitudes towards dating violence, which might increase their acceptance of the violence as well as their tolerance for the violence. If that is the case, then an attitude which is indicative of acceptance of dating violence might be an important factor to include in dating violence prevention and intervention programs.

Hypotheses

This study aimed at replicating and extending the O'Keefe and Treister's (1998) model of victimization by focusing on certain components of the model. The focus was on the predictive value of previous exposure of violence (i.e., witnessing interparental violence and childhood abuse) and acceptance of violence for dating violence victimization among college women. This study more specifically predicted that college students who had been exposed to violence and reported being more accepting of the violence would be at a greater risk to become victims of dating violence.

Hypothesis 1:

Previous exposure to violence (witnessing interparental violence and/or childhood abuse) and acceptance of dating violence would predict dating violence victimization. Acceptance of dating violence was expected to account for significantly more of the variance in victimization after considering previous exposure.

Hypothesis 2:

Acceptance of dating violence would mediate the relationship between previous exposure and victimization.

Hypothesis 3:

Based on previous research, this study predicted that victims were also likely to report being perpetrators of dating violence. Therefore, among the victims, a positive correlation was predicted between the victimization and perpetration indicating that higher levels of victimization were related to higher levels of perpetration.

Method

Participants

Undergraduate female students enrolled in introductory classes in psychology at the University of Arkansas were recruited for this study. Two hundred women consented to participate in this study. However, 11 of them did not answer any of the questionnaires and they were therefore excluded from this study. This resulted in a final sample of 189 participants.

Measures

Demographics and relationship status. This questionnaire included information about respondent demographics (e.g., age, sex, year in school, ethnicity, and sexuality) and relationship status (e.g., current and past dating experiences).

Witnessing interparental abuse. A total of four questions were created to address witnessing father physically abuse mother and witnessing mother physically abuse father. There were two questions for each parent as a perpetrator to allow for inclusion of both minor (e.g., pushing, shoving, grabbing, slapping, or throwing something at partner) and severe (e.g., choking, beating up, burning, scolding, kicking, or using a knife or gun on partner) violent acts as used in the CTS2 (Straus et al., 1996). Participants were coded as having witnessed interparental abuse if they answered yes to one or more of the four questions. Witnessing interparental abuse was scored as 1 and not witnessing was scored as 0.

Childhood abuse. Selected items from Briere's (1992) Childhood Maltreatment Interview Schedule Short Form (CMIS-SF) were used to determine participants' experiences of childhood abuse. The questions included physical, sexual, and psychological abuse by parent or caregiver before the age of 17. According to Briere there are no studies on the psychometrics of the CMIS-SF, partly because the measure does not have a total score that is used for a clinical cutoff to determine abuse status. There are no scores for two of the subscales (physical and sexual abuse).

This study identified participants as being abused as children if they answered yes to one or more of the questions regarding physical and/or sexual abuse experiences. For sexual abuse, the perpetrator also had to have been either a family member and/or at least five years older than the participant. Presence of childhood abuse was scored as 1 and absence of it was scored as 0.

Predictions for psychological childhood abuse were not initially included in the hypotheses for this study but data regarding such abuse were used in the post-hoc

analyses. Using Briere's CMIS-SF, participants were asked if any of the seven items included as descriptive of psychological abuse ever happened to them before the age of 16. The scale used for each item ranges from *never* (0) to *over 20 times a year* (6). Respondents are asked to endorse an item "if their parents, stepparents, foster parents, or other adult in charge of them as a child ever did any of the following to them" (See Appendix E). Examples of items are "criticize you," "ridicule or humiliate you," and "make you feel like you were a bad person." A total score was calculated by summing the responses to the seven items. Participants were considered psychologically abused as children if they had a score of 21 or higher (i.e., at or above the 75th percentile).

Acceptance of violence. The Attitudes Towards Dating Violence Scales was used to determine college students' acceptance of dating violence (Price & Byers, 1999). The measure has two scales: Attitudes Towards Male Dating Violence (AMDV) and Attitudes Towards Female Dating Violence (AFDV). Both AMDV and AFDV have three subscales of attitudes towards males' and females' use of psychological (AMVD-Psyc and AFVD-Psyc), physical (AMVD-Phys and AFVD-Phys), and sexual violence (AMVD-Sex and AFVD-Sex). The AMVD consists of 39 items and the AFVD consists of 37 items. The physical and the sexual violence scales each have 12 items while the psychological violence scale has 15 for the AMVD and 13 for the AFVD. Participants are asked to endorse their agreement or disagreement with 76 items. Items are scored using a likert scale ranging from *strongly disagree* (1) to *strongly agree* (5); "higher scores indicate a greater acceptance of abusive behavior" (p. 359).

Examples of items referring to acceptance of male and female perpetrated physical violence are "a guy usually does not slap his girlfriend unless she deserves it" (p.

358) and "some guys deserve to be slapped by their girlfriends" (p.360). For sexual

violence, examples are "a guy should not touch his girlfriend unless she wants to be

touched" (p. 359) and "a guy who goes into a girl's bedroom is agreeing to sex" (p. 361).

Lastly, two examples of male and female perpetrated psychological violence are "a guy

should not insult his girlfriend" (p. 358) and "girls have a right to tell their boyfriends

what to do" (p. 360).

Internal consistencies for the AMVD range between $\alpha = .76$ (girls' responses to

the AMVD-Psyc) to $\alpha = .88$ (boys' responses to the AMVD-Sex) and between $\alpha = .72$

(boys' responses to the AFVD-Psyc) and $\alpha = .87$ (boys' responses to the AFVD-Sex) for

the AFVD. The measure shows evidence for convergent validity as it correlates with

AWSA (Attitudes Toward Women Scale for Adolescents; Galambos, Peterson, Richards,

& Gitelson 1985), which is a measure of traditional gender role beliefs (higher scores

indicating being more accepting of traditional gender roles). Price and Byers (1999)

reported evidence for criterion-related validity of their measure as well. Boys and girls

who were more accepting of violence were also more likely to perpetrate violence, and

boys were more accepting of violence if they reported having a male friend who is a

perpetrator; nevertheless, this was not true for physical violence.

Participants' acceptance for male-to-female violence was determined by

calculating their total score on the AMDV. Similarly, participants' acceptance for

female-to-male violence was determined by calculating their total score on the AFDV.

After reverse coding some of the items, a higher score indicates greater acceptance. The

AMDV and AFDV scores were also combined into a total acceptance score.

Victimization and perpetration rates. The Revised Conflict Tactics Scale (CTS2; Straus et al., 1996) was used in order to determine perpetration and victimization rates of dating violence. The CTS2 and its previous versions are one of the most common measures used to establish rates of IPV. According to Straus and colleagues, the measure is designed to measure "concrete acts and events" and "is not intended to measure attitudes about conflict or violence nor the causes or consequences of using different tactics" (1996, p. 284). The measure has a total of 78 questions (39 items asked twice; once about the participant and once about his or her partner). For each item, participants are asked how often the described event has occurred in the past year and the options range from 0 (*this has never happened*) to 7 (*not in the past year, but happened before*) with values in between ranging from 1 (*once in the past year*) to 6 (*more than 20 times in the past year*). The measure has five scales with two subscales each: Physical assault (minor, severe), sexual coercion (minor, severe), psychological aggression (minor, severe), negotiation (emotional, cognitive), and injury (minor, severe). The physical assault scale determines acts of physical violence, while the psychological aggression scale determines verbal and non-verbal psychological/emotional violence such as "insulted or swore at my partner" and "threatened to hit or throw something at my partner" (p. 308). Straus and colleagues define sexual coercion as "behavior that is intended to compel the partner to engage in unwanted sexual activity" (p. 290) such as "made my partner have sex without a condom" (p. 309) and "used threats to make my partner have sex" (p. 309). Negotiation is defined as "actions taken to settle a disagreement through discussion" (p. 289); for example, "showed respect for my partner's feelings about an issue" (example of emotional negotiation; p. 308) and

"suggested a compromise to a disagreement" (example of cognitive negotiation; p. 308).

The injury scale measures physical injury due to partner's physical abuse.

The CTS2 subscales have been shown to be reliable by internal consistency values ranging from $\alpha = .79$ (psychological aggression) to $\alpha = .95$ (injury) (Straus et al., 1996). The various items have a mean correlation of $\alpha = .77$ with values ranging from $\alpha = .34$ (sexual coercion item; insisted on sex without a condom) to $\alpha = .92$ (injury item; partner was cut or bleeding) (Straus et al., 2006). Moreover, the measure has evidence for construct validity as indicated by its discriminative, convergent, and divergent validity. According to Straus and colleagues (1996), the higher correlation for males compared to females between the sexual coercion scale and the psychological aggression scale ($r = .66$ for men and $r = .25$ for women) and between the sexual coercion scale and the physical assault scale ($r = .90$ for men and $r = .26$ for women) indicates that the sexual coercion scale has discriminative validity. Men are more likely to be sexually coercive than women and therefore their scores should be more highly correlated with the other two scales. Furthermore, discriminative validity is evidenced by a higher correlation between the injury and the physical assault scales for men ($r = .87$) than for women ($r = .29$) because men's use of physical violence tends to result in more serious injury. Additionally, the psychological aggression and the physical assault scales are correlated for men ($r = .71$) and women ($r = .67$) which is evidence for convergent validity. Lastly, the authors show a negative correlation between a measure of social integration (the SI scale) and the physical assault scale, which indicates divergent validity because people who use physical violence should be less socially integrated. Divergent validity was also evidenced by low correlations between the negotiation and the sexual

coercion scales, which according to the authors should not be highly correlated since they are two different constructs.

In this study the physical assault subscale of the CTS2 was used to determine levels of victimization and perpetration among female college students. There is a total of 24 physical assault items (12 for determining participant's victimization level and 12 for determining their perpetration level). The answer options included for this study were from 0 (*this has never happened*) to 6 (*more than 20 times in the past year*). A total score was calculated for each participant by adding the scores together for all 12 items (max = 72). A higher score indicates higher levels of physical violence.

The sexual and psychological victimization scales were used for some of the post-hoc analyses. As for physical victimization, only answer options 0 (*this has never happened*) to 6 (*more than 20 times in the past year*) were included in this study. The items were summed to yield a total score, with a higher score indicating higher levels of victimization. There are 8 items for psychological victimization and 7 items for sexual victimization.

Procedure

Female undergraduate students at the University of Arkansas were recruited to participate in this study through the online experiment system and they earned two credits for their introductory psychology class for participating. First, the participants read the consent form online, in which they were informed about the intentions of the study as well as its potential risks. After consenting, they answered the questionnaires online. The participants completed questionnaires about demographics and relationship status, witnessing interparetal abuse, childhood abuse (CMIS-SF; Briere, 1992), acceptance of

dating violence (AMDV and AFDV; Price & Byers, 1999), and dating violence victimization and perpetration (CTS2; Straus et al., 1996). Lastly, the participants were debriefed online.

Analytic Approach

The first and second hypotheses were tested by using a hierarchical regression analysis. Witnessing interparental abuse and childhood abuse were entered as a functional set in the first step of the regression analysis. In the second step, acceptance of dating violence was entered. Dating violence victimization was entered as the dependent variable. Both exposure to violence and acceptance of violence were expected to be significant predictors of dating violence victimization. Effect sizes were calculated using f^2 for hierarchical regression analyses, $f^2 = (R^2_{AB} - R^2_A) / (1 - R^2_{AB})$. Small effect size is .02, medium is .15, and large is .35.

Additionally, acceptance was expected to mediate the relationship between previous exposure and victimization. Baron and Kenny's (1986) approach to test for mediation was utilized, which includes a series of regression analyses. First, the two exposure variables (i.e., witnessing interparental abuse and childhood abuse) were entered as independent variables and physical victimization was entered as the dependent variable (e.g., path c). Next, the two exposure variables were entered as independent variables, but this time acceptance was entered as the dependent variable (e.g., path a). The third regression analysis was done by entering acceptance as the independent variables and physical victimization as the dependent variable (e.g., path b). Lastly, the two exposure variables and the acceptance variable were entered as independent variables and physical victimization was entered as the dependent variable (e.g., path c′). The first

three regression analyses should be significant. In the last regression analysis in which both the exposure variables and the acceptance variable were entered as independent variables, the path should either not be significant any more (i.e., full mediation) or the path should be less significant (i.e., partial mediation). The regression analyses including acceptance were performed using the total acceptance score (combining AMDV and AFDV) as well as AMDV and AFDV separately.

In addition to the Baron and Kenny (1986) approach, the Sobel test was used to test for any indirect effects of acceptance in the relationship between exposure to violence and victimization (Preacher, & Hayes, 2004). In the Sobel test, the unstandardized coefficients and their standard errors were entered for path a and b to test for the indirect effect of acceptance. The analyses were done separately for the two exposure variables to test if there was an indirect effect of acceptance in the relationship between witnessing interparental abuse and victimization as well as childhood abuse and victimization. This was performed for the total acceptance score as well as for AMDV and AFDV separately.

The third hypothesis was analyzed by correlating the victims' scores on the physical assault victimization scale with their perpetration scores to determine if there was a positive correlation between victimization and perpetration scores.

Power Analysis

Previous research on dating violence among college students has found medium to large effect sizes when examining acceptance of violence based on blaming the victim or the perpetrator ($\eta^2 = 0.15$-0.52; Witte et al., 2006) and less than small effect sizes when examining motivations for violence ($\varepsilon^2 = 0.01$-0.12; Follingstad et al., 1999). Based on

the previous mentioned effect sizes, this study expected at least a small to medium effect size of f = 0.06 and a power of 0.8, which required using 200 participants.

Post hoc power analyses were done using G* Power 3 (Erdfelder, Faul, & Buchner, 1996) for multiple regressions (Omnibus R^2 deviation from zero). The program calculates power based on effect size f^2, α - level (.05), total sample size, and number of predictors.

<div align="center">

Results

</div>

Demographics

Mean age was 19.40 years (*SD* = 4.04; range 18-53 years) and 97.4% (n = 184) of the women were younger than 25 years old. Most of the participants were freshman (54.5%; n = 103) and sophomore (31.2%; n = 59) college students. The majority of the women self-identified as Caucasian (84.7%; n = 160) whereas the other participants self-identified as Asian American (5.3%; n = 10), Hispanic (4.2%; n = 8), African American (1.6%; n = 3), Native American (1.1%; n = 2), and other (3.2%; n = 6). Moreover, most students reported being heterosexual (98.9%; n = 187) and two students reported being bisexual. The self-identified bisexual women were included in the study as there were only two of them, which did not impact the results.

The participants were on average 15.97 years old when they started dating (*SD* = 1.92; range 11-28). Out of the 189 participants, 59.3% (n = 112) reported currently being in a dating relationship. Seventy-six of the daters reported being in a steady relationship (67.8%), 20 in a casual relationship (17.9%), 9 lived with their partner (8.0%), and 6 were engaged (5.4%). Most of the daters reported that their partner was older than them (55.8%; n = 63) while 32.7% (n = 37) reported that their partner was the same age and

11.5% (n = 13) reported that they were dating someone younger than them. Mean age for partners was 21.02 years (*SD* = 5.95; range 17-58). Three quarters of the sample had been in one to five dating relationships (n = 143), 16.4% had been in six to ten relationships (n = 31), and the rest of the daters had been in more than ten relationships (n = 9). On average the women reported that they had been in 1.77 number of serious relationships (*SD* = .96; range 0-5) and 40.7% of the daters (n = 74) reported that their current relationship was also their longest relationship.

Missing data

Both childhood exposure to violence variables (witnessing interparental abuse and childhood abuse) had less than 5% missing data. Acceptance of male perpetration (AMDV) had 9.0% (n = 17) missing data and acceptance of female perpetration (AFDV) had 11.1% (n = 21) missing data. When combining AMDV and AFDV, there was 18.0% (n = 34) missing data. Acceptance for physical, sexual, and psychological dating violence were scored by summing acceptance for male and female physical, sexual, and psychological perpetrated violence independently (e.g., AMDV-Phys and AFDV-Phys, AMDV-Psyc and AFDV-Psyc, and AMDV-Sex and AFDV-Sex). There was 7.9% (n = 15) missing data for acceptance of physical and sexual perpetration and there was 9.0% (17) missing data for acceptance of psychological perpetration. There was 13.8% (n = 25) missing data for physical victimization and 13.2% (n = 26) for physical perpetration.

In terms of the additional variables that were used in the post-hoc analyses, there was less than 5% missing data for psychological child abuse. There was 13.8% (n = 25) missing data for sexual victimization and 19.0% (n = 36) missing data for psychological

victimization. For the perpetration variables, there was 8.5% (n = 16) missing data for

sexual perpetration and 17.5% (n = 33) for psychological perpetration.

Since both the acceptance and dating violence (victimization and perpetration)

variables had more than 5% missing data, several analyses were done to test for any

patterns to the missing data. All the acceptance, victimization, and perpetration variables

were dummy coded for missing data. Next, independent t-tests were used to test for any

differences on the dummy coded acceptance variables across the other acceptance

variables (e.g., the dummy coded variables were entered as independent variables and the

total sums of the other acceptance variables were entered as dependent variables). The

same was done for the dummy coded victimization and perpetration variables to test for

differences on the other victimization and perpetration variables (e.g., dummy coded

physical victimization variable and differences on sexual and psychological victimization

total scores). There were no significant differences; however, there was a marginal

difference for the dummy coded sexual perpetration variable and amount of

psychological perpetration, $t(154) = 1.77$, $p = .081$. The missing group reported less

psychological perpetration ($M = 3.11$, $SD = 3.66$) compared to the non-missing group ($M = 7.52$, $SD = 7.40$).

Additionally, Chi Square and independent t-tests were used to test for patterns in

the dummy coded missing data variables across predictor and outcomes variables. The

dummy coded acceptance variables were tested for differences across the child exposure

variables as well as the victimization and perpetration variables. Likewise, the dummy

coded victimization and perpetration variables were tested for differences across the child

exposure variables and the acceptance variables. There were significant differences on

the dummy coded variable for acceptance of physical dating violence (total sum of AMDV-Phys and AFDV-Phys) and sexual perpetration, $t(171) = 2.90$, $p < .01$. The missing group reported more sexual perpetration ($M = 2.82$, $SD = 3.54$) compared to the non-missing group ($M = .83$, $SD = 2.10$). There were marginal differences for dummy coded AMDV variable and witnessing interparental abuse ($\chi^2 = 2.93$, $p = .087$), dummy coded physical victimization variable and child sexual abuse ($\chi^2 = 3.55$, $p = .059$), and dummy coded psychological victimization variable and psychological child abuse ($\chi^2 = 2.87$, $p = .090$).

Lastly, the dummy coded missing data variables were tested for differences on several demographical variables (i.e., participant's age, ethnicity, dating status, number of partners, age at first relationship, and partner's age). There were several significant differences on participant's age (physical and sexual victimization, $p < .05$; physical and sexual perpetration, $p < .01$), ethnicity (acceptance of psychological violence, $p < .01$; physical and sexual victimization, $p < .05$; sexual perpetration, $p < .05$), dating status (psychological victimization, $p < .01$; psychological perpetration, $p < .05$), number of partners (physical victimization and perpetration, $p < .05$), and partner's age (physical victimization, $p < .01$; physical, sexual, and psychological perpetration, $p < .05$). There were also several marginal differences on dummy coded missing data variables and participant's age (psychological perpetration, $p = .059$), ethnicity (acceptance of sexual violence, $p = .088$), and partner's age (sexual victimization, $p = .061$). For the two continuous variables (participant's and partner's age), the missing groups were older and had older partners than the non-missing group. There were no significant differences for missing data variables and age at first relationship.

Because several variables had more than 5% missing data, regression analyses were run with and without missing data for physical victimization and the acceptance variables (e.g., total acceptance score, AMDV, AFDV, acceptance of physical violence, AMDV-Phys, and AFDV-Phys). There were no differences in the results and therefore the analyses below include the participants with missing data in the analyses.

Assumptions

Hierarchical regression analyses are based on several assumptions. The residuals should be normally distributed and linear. Homoscedasticity and independence of errors are also assumed. There should not be any singularity or multicollinearity among the predictor variables and there should not be any outliers. Outliers were determined by Mahalanobis and Cook's distance as well as standardized residuals values exceeding 3.3 standard deviations (above or below 0).

In this study there were violations of assumptions on linearity of residuals and homoscedasticity, mostly because several of the variables were not normally distributed. The victimization variables (physical, sexual, and psychological) as well as some of the acceptance variables (AMDV, AFDV, and acceptance of sexual violence) that were not normally distributed were transformed in an attempt to normalize the distributions. The variables were transformed using three formulas: inverse, logarithm, and square root. Even after the transformations, the variables were still not normally distributed and they still violated the same assumptions. Therefore, the decision was made to run the regression analyses with the non-transformed variables.

Descriptive Statistics

Exposure variables. Twenty-seven women (14.3%) reported witnessing at least of their parents abusing their other parent. Fifteen (55.6%) of those 27 childhood victims reported that their father was the sole abuser. A third of the childhood victims reported witnessing their father perpetrating mild violence only (n = 9), 18.5% reported witnessing their father perpetrate both mild and severe violence (n = 5), and 3.7% reported witnessing their father perpetrate severe violence only (n = 1). Eight childhood victims (29.6%) had seen both of their parents abuse each other. Five of them (18.5%) witnessed both parents perpetrate mild violence only, 2 (7.4%) witnessed both parents perpetrate mild violence as well as their father perpetrate severe violence, and 1 (3.7%) witnessed both parents perpetrate mild and severe violence. The last 4 childhood victims (14.8%) reported witnessing their mother abuse their father. Two of them (7.4%) witnessed their mother perpetrate mild and severe violence and the other 2 witnessed their mother perpetrate mild violence only.

For the childhood abuse variables, 11.1% (n = 21) reported physical abuse and 15.3% (n = 29) sexual abuse. The sexual abuse victims reported either being abused by someone who was at least 5 years older than them (48.3%, n = 14) or a family member (34.5%, n = 10). The remaining 5 sexual abuse victims (17.2%) reported that they had been sexually abused but did not report the identity of the abuser. When combining sexual and physical childhood abuse, 23.3% (n = 44) of the women reported being victims of at least one form of abuse. Of those 44 women, 52.3% (n = 23) were sexually abused, 34.1% (n = 15) physically abused, and 13.6% (n = 6) were both physically and sexually abused.

Approximately a third of the sample (30.7%, n = 58) reported some exposure to interpersonal violence as children. Thirty-one of these women (53.4%) had been abused, 14 (24.2%) witnessed interparental violence, and 13 (22.4%) had both been abused and witnessed their parents abuse each other.

As mentioned previously, psychological child abuse was not part of the hypotheses but was used for some of the post-hoc analyses. See Table 1 for means, standard deviations, and range for the 7 items and the total score. One-fourth of the women (24.9%, n = 47) were psychologically abused as children.

Acceptance. Table 2 shows the means, standard deviations, and range for the acceptance variables. Paired t-test analyses showed that participants were more accepting of psychological perpetration than physical ($t(162) = 12.19$, $p < .001$) and sexual perpetration ($t(163) = 16.50$, $p < .001$). They were also more accepting of physical than sexual dating violence, $t(163) = 3.76$, $p < .001$. Female perpetrated violence was rated as more acceptable than male perpetrated violence, $t(154) = 2.59$, $p < .05$, which was true for both physical and sexual female perpetration (physical: $t(173) = 10.43$, $p < .001$; sexual: $t(173) = 5.33$, $p < .001$) but male perpetrated psychological violence was rated as more acceptable than female perpetrated psychological violence, $t(171) = 9.25$, $p < .001$. Male perpetrated psychological violence was rated as more acceptable than male perpetrated physical ($t(174) = 21.13$, $p < .001$) and sexual violence ($t(176) = 21.85$, $p < .001$). There was no significant difference between acceptability of physical and sexual dating violence for male perpetration, $t(176) = 1.52$, $p = .13$. Both female perpetrated psychological ($t(171) = 6.48$, $p < .001$) and physical ($t(172) = 5.87$, $p < .001$) violence were rates as more acceptable than sexual violence. There was no significant difference

between acceptability of physical and psychological dating violence for female perpetration, $t(172) = .36$, $p = .72$.

Dating violence. Table 3 shows the means, standard deviations, and range for physical, sexual, and psychological victimization and perpetration. Almost a fourth of the sample (23.3%; n = 44) reported at least one incident of physical victimization. Twenty-five of the victims (56.8%) reported being victims of minor physical violence, 4 (9.1%) reported being victims of severe physical violence, and 15 (34.1%) reported being victims of both mild and severe physical violence. Almost a third of the sample (31.2%; n = 59) reported perpetrating physical violence at least once. Thirty-five of the perpetrators (59.3%) reported perpetrating minor physical violence, 7 (11.9%) perpetrating severe physical violence, and 17 (28.8%) perpetrating mild and severe physical violence.

Overall in this sample of college females, 32.8% (n = 62) reported at least one experience with physical dating violence; 8.1% (n = 5) reported being victims only, 32.3% (n = 20) perpetrators only, and 59.7% (n = 37) reported being both victims and perpetrators.

Sexual victimization was reported by 27.0% (n = 51) of the sample; 90.2% (n = 46) of the sexual abuse victims reported minor abuse, 2.0% (n = 1) severe abuse, and 7.8% (n = 4) both minor and severe abuse. Sexual perpetration was reported by 20.6% of the sample (n = 39); 94.9% (n = 37) of the sexual perpetrators reported minor abuse, 2.6% (n = 1) severe, and 2.6% (n =1) both minor and severe. Overall, 28.0% (n = 53) reported at least one experience with sexual dating violence and 34.0% (n = 18) of them

reported being victims only, 5.7% (n = 3) perpetrators only, and 60.4% (n = 32) reported being both victims and perpetrators.

Psychological victimization and perpetration were the most commonly reported forms of dating violence, with 59.8% (n = 113) reporting victimization and 62.4% (n = 118) reporting perpetration of acts of psychological violence. Sixty-eight of the victims (60.2%) reported minor acts of victimization, and 39.8% (n = 45) minor and severe acts. Sixty-eight of the perpetrators (57.6%) reported minor acts of perpetration and 50 (42.4%) reported minor and severe acts. Overall, 61.9% (n = 117) reported at least one experience with psychological dating violence, with 2.6% (n = 3) reporting being victims only, 4.3% (n = 5) perpetrators only, and 93.2% (n = 109) reporting being both victims and perpetrators.

Lastly, 70.4% (n = 133) of the sample reported some experience with dating violence (e.g., physical, sexual, and/or psychological violence), with 48.1% (n = 64) of those participants reporting the experience of one type of dating violence, 29.3% (n = 39) two types, and 22.6% (n = 30) all three types.

Hypotheses

Hypothesis 1. See Table 4 for the correlations between child exposure variables, acceptance variables, and victimization and perpetration variables. Refer to Table 5 for the unstandardized regression coefficients (*B*), standard errors (*SE*), standardized regression coefficients (β), and R^2. In the first hierarchical regression analysis with the total acceptance score in the second step (combining AMDV and AFDV), witnessing interparental abuse and child abuse (physical and/or sexual) did not account for significant amount of variance in physical victimization, $R^2 = .04$, $F(2, 134) = 2.52$, $p =$

.084. Moreover, acceptance did not explain a significant proportion of the variance in physical victimization, $\Delta R^2 = .01$, $\Delta F(1, 133) = 1.65$, $p = .20$. None of the variables were significant predictors of physical victimization. The effect size for these analyses was small, $f^2 = .013$.

In the second hierarchical regression analysis with the AMDV score in the second step, witnessing interparental abuse and child abuse (physical and/or sexual) did not account for significant amount of variance in physical victimization, $R^2 = .04$, $F(2, 149) = 2.80$, $p = .064$, and acceptance of male perpetrated violence (AMDV) did not account for significant amount of variance in physical victimization $\Delta R^2 = .01$, $\Delta F(1, 148) = .73$, $p = .39$. The first step was marginally significant and witnessing interparental was a significant predictor, $B = 2.14$, $t = 2.03$, $p < .05$. Childhood abuse and acceptance of male perpetrated violence were not significant predictors. The effect size was small, $f^2 = .005$. See Table 6 for the unstandardized regression coefficients (B), standard errors (SE), standardized regression coefficients (β), and R^2.

In the third analysis, with AFDV in the second step, witnessing interparental abuse and child abuse (physical and/or sexual) did not account for significant amount of variance in physical victimization, $R^2 = .04$, $F(2, 145) = 2.73$, $p = .069$, and acceptance of female perpetrated violence (AFDV) did not account for significant amount of variance in physical victimization, $\Delta R^2 = .02$, $\Delta F(1, 144) = 3.68$, $p = .057$. Both the first and the second step were marginally significant. Witnessing interparental abuse was a significant predictor ($B = 2.14$, $t = 2.00$, $p < .05$) while AFDV ($B = .04$, $t = 1.92$, $p = .057$) was marginally significant. The effect size for these analyses was small, $f^2 = .026$. See Table

7 for the unstandardized regression coefficients (B), standard errors (SE), standardized regression coefficients (β), and R^2.

Taken together, hypothesis 1 was not supported as neither exposure to childhood violence nor acceptance were significant predictors of physical dating violence victimization.

Hypothesis 2. Refer to Table 8 for the unstandardized regression coefficients (B), standard errors (SE), standardized regression coefficients (β), and R^2. Several regression analyses were used to test for acceptance as a mediator. In the first analysis, the exposure variables (witnessing interparental abuse and physical and/or sexual child abuse) did not account for significant amount of variance in physical victimization, $R^2 = .04$, $F(2, 161) = 3.03$, $p = .051$; however, it was marginally significant, and witnessing interparental abuse was a significant predictor of physical victimization, $B = 2.14$, $t = 2.11$, $p < .05$, indicating that those who witnessed interparental abuse as children were more likely to report being physically victimized as adults compared to those who did not witness interparental abuse. Child abuse was not a significant predictor. The second regression analysis was not significant, which indicates that exposure to violence as a child did not account for significant amount of variance in acceptance of dating violence (combining AMDV and AFDV), $R^2 = .01$, $F(2, 152) = .95$, $p = .39$, and none of the exposure variables were significant predictors of acceptance. Moreover, acceptance did not account for significant amount of variance in physical victimization, $R^2 = .02$, $F(2, 135) = 2.29$, $p = .13$, and was therefore not a significant predictor of victimization. Lastly, there was no difference in the results when entering the exposure variables and acceptance as

predictors of physical victimization, $R^2 = .05$, $F(2, 133) = 2.24$, $p = .087$, as none of the variables significantly predicted physical victimization.

Acceptance of male perpetrated violence (AMDV) did not change the previous results as the exposure variables did not account for significant amount of variance in AMDV, $R^2 = .02$, $F(2, 169) = 1.28$, $p = .28$, AMDV did not explain a significant amount of variance in physical victimization, $R^2 = .01$, $F(1, 150) = 1.25$, $p = .27$, and all three predictors entered at once (exposure variables and AMDV) did not explain a significant amount of variance in physical victimization, $R^2 = .04$, $F(3, 148) = 2.11$, $p = .10$. Refer to Table 9 for the unstandardized regression coefficients (B), standard errors (SE), standardized regression coefficients (β), and R^2 for acceptance of male perpetrated violence as a mediator between childhood exposure and dating violence victimization.

Similarly, the exposure variables did not account for significant amount of variance in acceptance of female perpetrated violence (AFDV), $R^2 = .01$, $F(2, 164) = .81$, $p = .45$. However, AFDV did explain a significant amount of variance in physical victimization, $R^2 = .03$, $F(1, 146) = 4.50$, $p < .05$, and significantly predicted victimization, $B = .05$, $t = 2.12$, $p < .05$. Additionally, when entering the exposure variables and AFDV as independent variables, they accounted for a significant amount of variance in physical victimization, $R^2 = .06$, $F(3, 144) = 3.08$, $p < .05$. None of the predictors were significant; however, AFDV was marginally significant, $B = .04$, $t = 1.92$, $p = .057$. Refer to Table 10 for the unstandardized regression coefficients (B), standard errors (SE), standardized regression coefficients (β), and R^2 for acceptance of female perpetrated violence as a mediator between childhood exposure and dating violence victimization.

The above analyses do not support hypothesis 2 as path c (exposure variables predicting physical victimization) was not significant and it remained non-significant when entering the exposure variables and the acceptance variables together to predict victimization (path c′). The last path was significant when entering the exposure variables together with acceptance of female perpetration but this finding does not support that acceptance mediates the relationship between exposure to violence and later victimization.

The Sobel tests were consistent with this conclusion because none of the Sobel tests were significant (acceptance total: witnessing interparental abuse, z = .97, *SE* = .17, *p* = .33; child abuse, z = .31, *SE* = .12, *p* = .76; AMDV: witnessing interparental abuse, z = .90, *SE* = .16, *p* = .37; child abuse, z = .09, *SE* = .08, *p* = .93; AFDV: witnessing interparental abuse, z = 1.02, *SE* = .20, *p* = .31; child abuse, z = .22, *SE* = .15, *p* = .83).

Hypothesis 3. As predicted, there was a significant positive correlation between physical dating violence victimization and perpetration (*r* = .69, *p* < .001).

Power analysis. The post hoc power analysis showed that the power was .225 for the regression analysis using the total acceptance score, .110 for AMDV analysis, and .425 for AFDV. These results suggest that there could be problems with Type II errors, which is the rate of false negatives or poor sensitivity. Because of this the null hypothesis probably should have been rejected but it was not.

Post-hoc Analyses

Several studies have found a link between previous exposure to violence and subsequent dating violence (Gover et al., 2008; Hendy et al., 2003; Jankowski et al., 1999; O'Keefe, 1998; Riggs & O'Leary, 1996); however, this was not found in this

study. A series of post-hoc analyses were done in an attempt to understand why this

effect was not supported. Moreover, the post-hoc analyses were used to further explore

any impact acceptance of dating violence might play in the relationship between

childhood exposure to violence and dating violence victimization.

Hierarchical regression analyses were used to test if exposure to a specific type of

violence was related to an increased acceptance for that violence, which would predict

being a victim of that violence. Witnessing interparental abuse and physical child abuse

were entered in the first step and acceptance of physical dating violence was entered in

the second step to predict physical dating violence victimization. The same analysis was

done for acceptance of male physical perpetration (AMDV-Phys) and acceptance of

female physical perpetration (AFDV-Phys). Similarly, for sexual victimization as the

dependent variable, witnessing interparental abuse and sexual child abuse were entered in

the first step and acceptance of sexual dating violence was entered in the second step.

Separate analyses were done with AMDV-Sex and AFDV-Sex. Lastly, witnessing

interparental abuse and psychological child abuse were entered in the first step and

acceptance of psychological dating violence was entered in the second step to predict

psychological victimization. Separate analyses were done with AMDV-Psyc and AFDV-

Psyc. The mediation analyses were also done by separating exposure, acceptance, and

victimization variables by type of violence.

Hierarchical regression analyses. See Table 11 for the unstandardized

regression coefficients (*B*), standard errors (*SE*), standardized regression coefficients (β),

and R^2 for childhood exposure to physical violence, acceptance of physical violence, and

physical victimization. Witnessing interparental violence and physical child abuse did

not account for significant amount of variance in physical victimization, $R^2 = .04$, $F(2,$ 151) = 2.88, $p = .059$ and acceptance of physical dating violence did not explain a significant proportion of the variance in physical victimization, $\Delta R^2 = .02$, $\Delta F(1, 150) =$ 2.85, $p = .093$. The first step was marginally significant and witnessing was a significant predictor of physical victimization, $B = 2.64$, $t = 2.27$, $p < .05$. Exposure to physical child abuse was not a significant predictor.

Similar results were found for acceptance of male perpetrated physical violence as the exposure variables did not explain a significant amount of variance in physical victimization, $R^2 = .04$, $F(2, 155) = 2.96$, $p = .055$ and acceptance did not explain a significant proportion of the variance in physical victimization, $\Delta R^2 = .00$, $\Delta F(1, 154) =$ .00, $p = .99$. The first step was marginally significant and witnessing interparental abuse was again a significant predictor, $B = 2.64$, $t = 2.43$, $p < .05$. When acceptance of female perpetrated physical violence was entered in the second step, the exposure variables marginally accounted for a significant amount of variance in physical victimization, $R^2 =$ .04, $F(2, 157) = 3.00$, $p = .053$, and acceptance accounted for additional variance in physical victimization above and beyond the main effects of exposure variables, $\Delta R^2 =$ .04, $\Delta F(1, 156) = 6.48$, $p < .05$. Both witnessing and AFDV-Phys significantly predicted victimization, $B = 2.64$, $t = 2.44$, $p < .05$ and $B = .11$, $t = 2.55$, $p < .05$ respectively. The effect sizes for these analyses were small, $f^2 = .019$ (acceptance of physical violence) and $f^2 = .041$ (AFDV-Phys). There was no effect size for AMDV since the second step did not account for any variance. Refer to Tables 12-13 for the unstandardized regression coefficients (B), standard errors (SE), standardized regression coefficients (β), and R^2 for

acceptance of male and female perpetrated physical violence as predictors of physical dating violence victimization.

See Table 14 for the unstandardized regression coefficients (B), standard errors (SE), standardized regression coefficients (β), and R^2 for exposure to sexual violence as a child, acceptance of sexual violence, and sexual victimization. Witnessing interparental violence and child sexual abuse accounted for significant amount of variance in sexual victimization, $R^2 = .11$, $F(2, 148) = 8.79$, $p < .001$, and both exposure variables were significant predictors, $B = 2.36$, $t = 2.88$, $p < .01$ (witnessing), $B = 2.24$, $t = 2.82$, $p < .01$ (child sexual abuse). Acceptance of sexual dating violence did not explain additional variance in sexual victimization after accounting for the exposure variables, $\Delta R^2 = .01$, $\Delta F(1, 147) = 1.21$, $p = .27$.

The exposure variables also accounted for significant amount of variance when acceptance of male perpetrated sexual violence was entered in the second step, $R^2 = .11$, $F(2, 157) = 9.34$, $p < .001$, and acceptance explained additional variance above and beyond the main effects of witnessing interparental abuse and child sexual abuse $\Delta R^2 = .02$, $\Delta F(1, 156) = 3.93$, $p < .05$. All three predictors were significant, $B = 2.36$, $t = 2.97$, $p < .01$ for witnessing, $B = 2.24$, $t = 2.90$, $p < .01$ for child sexual abuse, and $B = .13$, $t = 1.98$, $p < .05$ for acceptance of male perpetrated sexual violence. The first step remained significant when acceptance of female perpetrated sexual violence was entered in the second step, $R^2 = .11$, $F(2, 151) = 8.97$, $p < .001$, but the second step was not significant, $\Delta R^2 = .00$, $\Delta F(1, 150) = .39$, $p = .53$. Both exposure variables remained significant predictors, $B = 2.36$, $t = 2.91$, $p < .01$ for witnessing, $B = 2.24$, $t = 2.85$, $p < .01$ for child sexual abuse. The effect sizes range from less than small ($f^2 = .008$ for acceptance of

sexual violence) to small ($f^2 = .025$ for AMDV-Sex). The effect size for AFDV-Sex was close to 0 ($f^2 = .002$). See Tables 15-16 for the unstandardized regression coefficients (*B*), standard errors (*SE*), standardized regression coefficients (β), and R^2 for acceptance of male and female perpetrated sexual violence as predictors of sexual dating violence victimization.

See Table 17 for the unstandardized regression coefficients (*B*), standard errors (*SE*), standardized regression coefficients (β), and R^2 for exposure to psychological violence as a child, acceptance of psychological violence, and psychological victimization. Witnessing interparental violence and child psychological abuse accounted for significant amount of variance in psychological victimization, $R^2 = .09$, $F(2, 140) = 6.75$, $p < .01$, and acceptance of psychological dating violence explained additional variance in victimization above and beyond the main effects of exposure variables, $\Delta R^2 = .06$, $\Delta F(1, 139) = 9.05$, $p < .01$. Both child abuse and acceptance were significant predictors of psychological victimization, $B = 5.55$, $t = 3.54$, $p < .01$ and $B = .16$, $t = 3.01$, $p < .01$ respectively.

Similar results were found for acceptance of male and female perpetration of psychological violence separately. The exposure variables accounted for significant amount of variance in victimization, $R^2 = .09$, $F(2, 146) = 7.04$, $p < .01$ for AMDV-Psyc, and $R^2 = .09$, $F(2, 143) = 6.90$, $p < .01$ for AFDV-Psyc. Acceptance accounted for significant amount of variance above and beyond the main effects of the exposure variables, $\Delta R^2 = .06$, $\Delta F(1, 145) = 10.17$, $p < .01$ for AMDV-Psyc and $\Delta R^2 = .03$, $\Delta F(1, 142) = 5.16$, $p < .05$ for AFDV-Psyc. Again, both child abuse and acceptance were significant predictors of psychological victimization, $B = 5.55$, $t = 3.62$, $p < .001$ and $B =$

.29, $t = 3.19$, $p < .01$ for AMDV-Psyc, $B = 5.55$, $t = 3.58$, $p < .001$ and $B = .22$, $t = 2.27$, $p < .05$ for AFDV-Psyc. The effect sizes range from small ($f^2 = .036$ for AFDV-Psyc) to small-to-medium ($f^2 = .065$ for acceptance of psychological violence and $f^2 = .070$ for AMDV-Psyc). Refer to Tables 18-19 for the unstandardized regression coefficients (B), standard errors (SE), standardized regression coefficients (β), and R^2 for acceptance of male and female perpetrated psychological violence as predictors of psychological dating violence victimization.

   Mediation analyses. Several regression analyses were used to test for acceptance of physical dating violence as a mediator between childhood exposure to physical violence and later physical victimization. Refer to Table 20 for the unstandardized regression coefficients (B), standard errors (SE), standardized regression coefficients (β), and R^2. In the first analysis, the exposure variables (witnessing interparental abuse and physical child abuse) accounted for significant amount of variance in physical victimization, $R^2 = .04$, $F(2, 161) = 3.07$, $p < .05$. Witnessing interparental abuse was a significant predictor of physical victimization, $B = 2.64$, $t = 2.47$, $p < .05$, but child abuse was not a significant predictor. Second regression analysis was not significant, which indicates that exposure to physical violence as a child did not account for significant amount of variance in acceptance of physical dating violence, $R^2 = .01$, $F(2, 170) = .62$, $p = .54$. None of the exposure variables were significant predictors of acceptance. Moreover, acceptance did not account for significant amount of variance in physical victimization, $R^2 = .02$, $F(1, 152) = 3.45$, $p = .065$, and was therefore not a significant predictor of victimization. Lastly, childhood exposure to physical violence and acceptance of physical violence accounted for significant amount of variance in physical

victimization, $R^2 = .06$, $F(3, 150) = 2.90$, $p < .05$, and witnessing abuse as a child

remained a significant predictor, $B = 2.49$, $t = 2.27$, $p < .05$.

The results were similar when acceptance of male perpetrated physical violence

was used as a predictor. The exposure variables did not account for significant amount of

variance in acceptance of male perpetrated physical violence, $R^2 = .03$, $F(2, 176) = 2.34$,

$p = .10$, and acceptance did not explain a significant amount of variance in physical

victimization, $R^2 = .00$, $F(1, 156) = .14$, $p = .71$. This time entering the exposure

variables and acceptance were not significant predictors of victimization, $R^2 = .04$, $F(3,$

$154) = 1.96$, $p = .12$. See Table 21 for the unstandardized regression coefficients (B),

standard errors (SE), standardized regression coefficients (β), and R^2.

Exposure variables were not significant predictor of acceptance of female

perpetrated physical violence, $R^2 = .00$, $F(2, 176) = .26$, $p = .77$; however, in contrast

with acceptance of male perpetrated violence, female perpetrated violence accounted for

significant amount of variance in physical victimization, $R^2 = .04$, $F(1, 158) = 6.71$, $p <$

$.05$, and acceptance was a significant predictor, $B = .12$, $t = 2.59$, $p < .05$. Moreover, the

exposure variables and acceptance of female perpetrated physical violence explained a

significant amount of variance in physical victimization, $R^2 = .08$, $F(3, 156) = 4.23$, $p <$

$.01$, and both witnessing interparental abuse and acceptance were significant predictors, B

$= 2.56$, $t = 2.41$, $p < .05$ and $B = .11$, $t = 2.55$, $p < .05$ respectively. See Table 22 for the

unstandardized regression coefficients (B), standard errors (SE), standardized regression

coefficients (β), and R^2.

Refer to Table 23 for the unstandardized regression coefficients (B), standard

errors (SE), standardized regression coefficients (β), and R^2 for acceptance of sexual

dating violence as a mediator between childhood exposure (witnessing interparental abuse and child sexual abuse) and subsequent sexual victimization. The exposure variables explained significant amount of variance in sexual victimization, $R^2 = .11$, $F(2, 159) = 9.45$, $p < .001$, and both witnessing abuse and child sexual abuse were significant predictors, $B = 2.36$, $t = 2.99$, $p < .01$ and $B = 2.24$, $t = 2.92$, $p < .01$ respectively. The exposure variables did not account for significant amount of variance in acceptance of sexual violence, $R^2 = .01$, $F(2, 170) = .62$, $p = .54$, and acceptance did not explain a significant amount of variance in sexual victimization, $R^2 = .01$, $F(1, 149) = 1.79$, $p = .18$. When entering the exposure variables and acceptance as predictors of sexual victimization, the variables accounted for significant amount of variance, $R^2 = .11$, $F(3, 147) = 6.27$, $p < .001$. Again, both of the exposure variables were significant predictors, $B = 2.34$, $t = 2.86$, $p < .01$ for witnessing and $B = 2.17$, $t = 2.72$, $p < .01$ for child sexual abuse.

The results were similar for acceptance of female sexual perpetration as the exposure variables did not predict acceptance, $R^2 = .01$, $F(2, 173) = .92$, $p = .40$, and acceptance did not predict sexual victimization, $R^2 = .01$ $F(1, 152) = .87$, $p = .35$. As in previous results, the exposure variables and acceptance of sexual violence explained a significant amount of variance in sexual victimization, $R^2 = .11$, $F(3, 150) = 6.09$, $p < .01$, and both the exposure variables were significant predictors, $B = 2.35$, $t = 2.90$, $p < .01$ for witnessing and $B = 2.19$, $t = 2.76$, $p < .01$ for child sexual abuse. Refer to Tables 24 for the unstandardized regression coefficients (B), standard errors (SE), standardized regression coefficients (β), and R^2.

For acceptance of male perpetrated sexual violence, the exposure variables did not predict acceptance, $R^2 = .00$, $F(2, 179) = .35$, $p = .70$, but acceptance accounted for significant amount of variance in sexual victimization, $R^2 = .03$, $F(1, 158) = 4.59$, $p < .05$. Acceptance of male perpetrated violence was a significant predictor, $B = .14$, $t = 2.14$, $p < .05$. The last regression analysis was also significant indicating that the exposure variables and acceptance accounted for significant amount of variance in sexual victimization, $R^2 = .13$, $F(3, 156) = 7.65$, $p < .001$, and all three predictors were significant, $B = 2.28$, $t = 2.89$, $p < .01$ for witnessing, $B = 2.19$, $t = 2.86$, $p < .01$ for sexual child abuse, and $B = .13$, $t = 1.98$, $p < .05$ for acceptance of male perpetrated sexual violence. See Table 25 for the unstandardized regression coefficients (B), standard errors (SE), standardized regression coefficients (β), and R^2.

The last mediation analyses were done for psychological dating violence to test if acceptance of psychological violence would mediate the relationship between exposure to violence as a child (i.e., witnessing interparental abuse and psychological child abuse) and subsequent psychological dating violence victimization. See Table 26 for the unstandardized regression coefficients (B), standard errors (SE), standardized regression coefficients (β), and R^2. The exposure variables explained a significant amount of variance in psychological victimization, $R^2 = .09$, $F(2, 150) = 7.24$, $p < .01$, but only child psychological abuse was a significant predictor, $B = 5.55$, $t = 3.66$, $p < .001$. The exposure variables were not significant predictors of acceptance, $R^2 = .02$, $F(2, 169) = 1.86$, $p = .16$. However, acceptance accounted for significant amount of variance in victimization, $R^2 = .06$, $F(1, 141) = 9.03$, $p < .01$, and acceptance was a significant predictor, $B = .17$, $t = 3.00$, $p < .01$. All three predictors (exposure and acceptance)

accounted for significant amount of variance in victimization, $R^2 = .14$, $F(3, 139) = 7.78$, $p < .001$. Child abuse and acceptance were significant predictors, $B = 5.54$, $t = 3.64$, $p < .001$ and $B = .16$, $t = 3.00$, $p < .01$ respectively, but witnessing was not.

Similar results were found for acceptance of male and female perpetrated psychological violence when entered instead of the overall acceptance variable. Exposure to violence did not predict acceptance of male or female perpetrated psychological violence, $R^2 = .01$, $F(2, 177) = 1.15$, $p = .32$ and $R^2 = .03$, $F(2, 173) = 2.29$, $p = .11$ respectively. Both of the acceptance variables explained a significant amount of variance in psychological victimization, $R^2 = .06$, $F(1, 147) = 8.49$, $p < .01$ for male perpetration and $R^2 = .04$, $F(1, 144) = 6.30$, $p < .05$ for female perpetration, and they were both significant predictors, $B = .28$, $t = 2.91$, $p < .01$ for male perpetration and $B = .24$ $t = 2.51$, $p < .05$ for female perpetration. Lastly, exposure and acceptance explained a significant amount of variance in victimization for acceptance of male perpetration, $R^2 = .15$, $F(3, 145) = 8.38$, $p < .001$, and female perpetration, $R^2 = .12$, $F(3, 142) = 6.45$, $p < .001$. Both child abuse, $B = 5.83$, $t = 3.91$, $p < .001$ for male perpetration and $B = 5.35$ $t = 3.49$, $p < .01$ for female perpetration and acceptance were significant predictors, $B = .29$, $t = 3.19$, $p < .01$ for male perpetration and $B = .22$ $t = 2.27$, $p < .05$ for female perpetration. See Tables 27-28 for the unstandardized regression coefficients (B), standard errors (SE), standardized regression coefficients (β), and R^2.

Based on the results above acceptance did not mediate the relationship between childhood exposure to violence and later dating violence victimization. Path c (exposure variables predicting physical victimization) was significant for physical, sexual, and

psychological violence but it also remained significant when entering the exposure variables and the acceptance variables together to predict victimization (path c′).

The Sobel tests were consistent with this conclusion because none of the Sobel tests were significant for physical victimization (acceptance total: witnessing interparental abuse, z = .89, *SE* = .18, *p* = .37; child abuse, z = .03, *SE* = .18, *p* = .98; AMDV: witnessing interparental abuse, z = .37, *SE* = .18, *p* = .72; child abuse, z = -.28, *SE* = .05, *p* = .78; AFDV: witnessing interparental abuse, z = .58, *SE* = .14, *p* = .56; child abuse, z = .06, *SE* = 1.69, *p* = .95), sexual victimization (acceptance total: witnessing interparental abuse, z = .24, *SE* = .09, *p* = .81; child abuse, z = .84, *SE* = .11, *p* = .40; AMDV: witnessing interparental abuse, z = .64, *SE* = .14, *p* = .52; child abuse, z = .44, *SE* = .13, *p* = .66; AFDV: witnessing interparental abuse, z = .20, *SE* = .06, *p* = .84; child abuse, z = .77, *SE* = .10, *p* = .44), or psychological victimization (acceptance total: witnessing interparental abuse, z = 1.58, *SE* = .53, *p* = .11; child abuse, z = .00, *SE* = .36, *p* = 1.00; AMDV: witnessing interparental abuse, z = 1.30, *SE* = .47, *p* = .19; child abuse, z = -.77, *SE* = .35, *p* = .44; AFDV: witnessing interparental abuse, z = 1.43, *SE* = .45, *p* = .15; child abuse, z = .73, *SE* = .31, *p* = .47).

The post-hoc analyses showed that childhood exposure to violence predicted physical victimization when looking at specific types of violent exposure as opposed to averaging across the different types. Witnessing interparental abuse significantly predicted physical victimization but child physical abuse did not. The exposure variables only accounted for marginally significant amount of variance in physical victimization. Both of the exposure variables (i.e, witnessing interparental abuse and sexual child abuse) predicted sexual victimization while only psychological child abuse predicted

psychological victimization. Moreover, acceptance of female-to-male perpetrated physical violence predicted physical victimization, acceptance of male-to-female perpetrated sexual violence predicted sexual victimization, and all three acceptance variables for psychological violence (i.e., male-to-female, female-to-male, and the combined score) predicted psychological victimization. None of the acceptance variables mediated the relationship between childhood exposure and subsequent dating violence victimization.

Discussion

Several research studies have found evidence supporting the intergenerational transmission of violence (Gover et al., 2008; Hendy et al., 2003; Jankowski et al., 1999; O'Keefe, 1998; Riggs & O'Leary, 1996). Children who are exposed to interpersonal violence while growing up are at heightened risk for being in violent intimate relationships as teenagers and adults. Most of these studies have focused on childhood exposure predicting later perpetration. More importantly, few studies have attempted to explain the mechanism by which childhood exposure may result in later dating violence exposure. It is likely that one or more variables could mediate or moderate the relationship between childhood exposure to violence and later experiences of intimate partner violence. Some researchers have proposed that attitudes, such as acceptance of dating violence, can affect the risk of later intimate partner violence (Flynn & Graham, 2010; Lichter & McCloskey, 2004).

The present study was specifically focused on extending the literature regarding intergenerational transmission of violence to victimization in an attempt to better understand possible risk factors associated with being a victim of dating violence. The

current study also attempted to determine if the trajectory of such transmission extended to victims the same way it did perpetrators of intimate partner violence. Based on findings from previous perpetration studies, it was expected that there would be a relationship between general childhood exposure to interpersonal violence and subsequent intimate partner physical violence victimization, such that exposure to any type of violence as a child (e.g., physical or sexual) would increase the risk for being a victim of physical dating violence. The assumption was that the dynamics that operate for perpetration would apply to victimization. The present study also examined the role of the mediating factor of acceptance of IPV as well as the relation between victimization and perpetration experiences in an individual.

Discussion of the findings will be organized to first review the major findings, followed by comparing the present findings to the existent literature, limitations, recommendations for future research in this area of study, and general conclusions.

Hypotheses 1 and 2

Based on previous research, the first hypothesis predicted that previous exposure to violence in childhood, either witnessing interparental abuse and/or experiencing child abuse, and acceptance of dating violence would predict physical dating violence victimization. Acceptance was predicted to account for additional variance in physical victimization in dating relationships after accounting for previous exposure to violence. The hypothesis was not supported by the data.   Results were similar when examining acceptance of male and female physical perpetration separately as well as combining scores for the two perpetration types to yield a general acceptance of dating violence perpetration.

The second hypothesis predicted that acceptance of dating violence would mediate the relationship between childhood exposure and subsequent dating violence victimization. Again, the data did not support this hypothesis. Using the Baron and Kenny (1986) approach to analysis, all three paths between the variables (e.g., from exposure to victimization, from exposure to acceptance, and from acceptance to victimization) should have been significant. Furthermore, when acceptance is entered in addition to the exposure variables, the path from exposure to victimization should have become non-significant or decreased in significance. This was not supported by the results. While the exposure variables did significantly predict victimization none of the other paths were significant. Even testing for an indirect effect of acceptance in the relationship between exposure and victimization was not supported by the results.

To possibly explain why current findings did not support a link between childhood exposure and later dating violence victimization, as had been found in previous research, several post-hoc analyses were conducted. The hypotheses for the current study predicted that there would be a general effect between childhood exposure to violence and subsequent physical victimization. In other words, it was predicted that exposure to any type of violence would predict physical victimization. However, Price and Byers (1999) found that students were more accepting of the type of violence they also reported perpetrating. Consequently, post-hoc analyses were conducted to test for the effect of exposure to specific types of violence (e.g., physical, sexual, and psychological) and being a victim of specific types of violence.

The first post-hoc analyses explored the possibility of predicting physical victimization by only entering physical exposure variables (witnessing interparental

abuse and physical child abuse) and acceptance of physical dating violence as predictors. This auxiliary post-hoc hypothesis predicted that women who were exposed to physical violence as children might be more likely to be accepting of physical violence and therefore more likely to be victims of physical dating violence.

The exposure variables accounted for marginally significant amount of variance in physical victimization, and witnessing interparental abuse was a significant predictor for physical victimization. This suggests that previous exposure, more specifically witnessing interparental abuse, predicts physical victimization. However, the effect sizes were small. Additionally, acceptance of female perpetrated physical violence was a significant predictor and accounted for additional variance above and beyond the exposure variables. Again, the effect size was small.

Next, acceptance was investigated as a mediator between childhood exposure to physical violence and later physical dating violence victimization (hypothesis 2). Neither the regression analyses nor the Sobel test supported the prediction of acceptance as a mediator for exposure to physical violence as a child and subsequent physical victimization.

Post hoc analyses were also conducted for both sexual and psychological violence to further explore the relationships between exposure, acceptance, and victimization with greater specificity of exposure and abuse type. Witnessing interparental abuse and child sexual abuse were significant predictors of sexual victimization, and child psychological abuse was a significant predictor of psychological victimization. For sexual victimization, only acceptance of male perpetrated sexual violence was a significant predictor. For psychological victimization all the acceptance variables were significant

predictors (acceptance of psychological violence, acceptance of male perpetrated psychological violence, and acceptance of female perpetrated violence). The effect sizes remained small on average.

Lastly, acceptance of dating violence was investigated as a mediator between childhood exposure and dating violence victimization (hypothesis 2) with separate analyses for sexual and psychological violence. As was found for physical violence, there was no support for acceptance as a mediator between exposure to violence as a child and subsequent dating violence victimization.

Overall, the findings did not support a global impact of childhood exposure to any type of familial violence (e.g., witnessing interparental abuse, physical and sexual child abuse) on later dating violence victimization. Instead the data supported a specific effect, such that being exposed to physical violence as a child increased the risk for being a victim of physical dating violence.

Hypothesis 3

The third hypothesis predicted a significant positive relation between physical victimization and physical perpetration of dating physical violence in females; this was supported by the data. This is consistent with previous studies showing that victims are also likely to be perpetrators (Bookwala et al., 1992; Harned, 2002; Katz et al., 2002; Luthra & Gidycz, 2006; O'Keefe & Treister, 1998; Riggs & O'Leary, 1996). There could be several different explanations for the bidirectionality of dating violence. Females tend to perpetrate milder types of violence (Teten et al., 2009) and in general dating violence most frequently involves milder violence. Females might also perpetrate violence as self-defense, which several research studies have found (Makepeace, 1986;

Molidor & Tolman, 1998; O'Keefe & Treister, 1998). It is also more socially acceptable for women to report perpetrating violence (Forbes et al., 2005; Merten, 2008; O'Keefe & Treister, 1998) and therefore they might be more likely to report acts of violence than men. Studies have shown that college females are more likely to report being both victims and perpetrators of dating violence compared to males (Follingstad et al, 1991; Gover et al., 2008; Lichter & McCloskey, 2004; Whitaker et al., 2007).

In previous studies the highest rates of dating violence have been reported for psychological violence followed by sexual and lowest rates for physical violence. These patterns have been found for both perpetration (Jackson et al., 2000) and victimization rates (Harned, 2002; Katz et al., 2002). The same pattern was found in the current study as 23.3% reported at least one incident of physical victimization, 27.0% reported sexual victimization, and 59.8% reported psychological victimization. Most of the women reported being victims of minor acts of violence (56.8% of victims of physical violence, 90.2% for sexual violence, and 60.2% for psychological violence).

While victimization and perpetration were correlated, the perpetration rates were somewhat higher than the victimization rates for physical (31.2% vs. 23.3%) and psychological violence (62.4% vs. 59.8%), with the sexual perpetration rate somewhat lower (20.6% vs. 27.0%). Overall, 67.2% of the sample reported being a victim of dating violence at least once (e.g., physical, sexual, and/or psychological) and 69.3% of the sample reported perpetrating violence at least once. These high rates of dating violence are similar to those found in previous studies with college students.

Straus (2004) reported on physical perpetration rates among 8,666 college students in 31 different countries around the world. Overall 29.0% of the college

students reported physical perpetration. In Gover and colleagues' (2008) college sample, 29% reported physical perpetration and 54% reported psychological perpetration. Victimization studies have also reported high rates of dating violence. Gover et al. (2008) reported that 22% of the college students were victims of physical violence and 52% were victims of psychological violence. Harned (2002) found that 39% of females reported sexual victimization.

It is important to recognize that the current study found similar victimization and perpetration rates and patterns compared to previous dating violence studies. This suggests that this aspect of sample characteristics cannot explain the differences in findings between the present study and those of previous dating violence studies. This will be especially relevant to keep in mind for the discussion below.

Comparing Current Study to Previous Studies

There could be numerous reasons why this study found limited evidence for the intergenerational transmission of violence or role of attitudes (e.g., acceptance) in predicting dating violence in young adults. To explore this issue further, the present study will be compared to similar studies on methodological issues such as sample characteristics, measurements, research design, and statistical methods. Studies investigating the intergenerational transmission of violence will be discussed first followed by studies of acceptance.

Intergenerational Transmission of Violence. While researchers have found support for the intergenerational transmission of violence, the findings from the current study provided limited support. The discussion below will first compare the current

study to studies that have focused on physical dating violence victimization and then compare it to studies focusing on physical dating violence perpetration.

Victimization. Several studies have found a link between childhood exposure and dating violence victimization (Gover et al., 2008; Hendy et al., 2003; Jankowski et al., 1999; Malik et al., 1997; O'Keefe, 1998). These studies have recruited samples that have similarities and differences compared to the sample used in the current study. While previous studies have focused on college students (Gover et al., 2008; Hendy et al., 2003; Jankowski et al., 1999) or high school samples (Malik et al., 1997; O'Keefe, 1998), the present study sampled college students. Even though the discrepancy in findings from the high school samples could be attributed to age or developmental differences, this explanation would not be valid for the differences between the college samples.

Moreover, most of the studies recruited larger samples than the present study (n = 2,541 for Gover et al., 2008; n = 608 for Hendy et al., 2003; n = 1,342 for Jankowski et al., 1999; n = 719 for Malik et al., 1997) but one of them had a similar sample size (n = 232 for O'Keefe, 1998). Since the present study found small effect sizes and low power, it is possible that sample size limitations did not allow for detecting an effect of the exposure variables predicting victimization. However, the one study with a similar sample size (O'Keefe, 1998) did find an effect, suggesting that the sample size used in the present study should be adequate to produce an effect if there is one. Nevertheless, most of the studies used larger sample sizes, which suggest that a future study would benefit from recruiting a larger sample.

Additionally, all of the previous studies included both males and females while the present study recruited women only. More importantly, two studies combined both

males and females in their analyses (Jankowski et al., 1999; Malik et al., 1997) but the other studies ran separate analyses for males and females (Gover et al., 2008; Hendy et al., 2003; O'Keefe, 1998). Even when separating analyses by gender, two of the studies had larger samples of females than the current study (n = 1,530 for Gover et al., 2008; n = 444 for Hendy et al., 2003). O'Keefe (1998) recruited 138 females in her study, suggesting that the sample size for the current study would be adequate. However, most studies still included larger samples than the present study and could therefore have benefited from recruiting more participants.

Moreover, most of the studies that have found a link between childhood exposure and subsequent dating violence have recruited mostly Caucasian participants (Gover et al., 2008; Hendy et al., 2003; Jankowski et al., 1999), which was also the case in this study. Two studies focused on minorities in which one study recruited equal proportions of African-Americans, Asian-Americans, and Latino/a (Malik et al., 1997) and the other recruited mostly Latino/a (O'Keefe, 1998). Since these studies have found support for the intergenerational transmission of violence with both similar and dissimilar sample characteristics (e.g., ethnicity/race) compared to the present study, ethnicity does not seem to impact whether there is an effect or not.

The research design could also influence whether there is a relationship between childhood exposure to violence and later dating violence victimization. The present study as well as the studies mentioned above all used a cross-sectional design. However, this study used an online questionnaire administration while most of the other studies administered the questionnaires in groups of participants (Gover et al., 2008; Malik et al., 1997; O'Keefe, 1998). One collected most of the data in classrooms but also allowed

participants to take the surveys home to complete and later drop off in a box (Hendy et al., 2003). One study did not specify how they collected the data (Jankowski et al., 1999). The studies that administered the questionnaires in person have more control in their studies compared to what was done in the current study. They are able to control for several confounding factors such as distractions (e.g., influence of other people and things in the environment). They are also able to answer questions if necessary. An online questionnaire does not control for any of these potential confounding factors; therefore it is possible that the results were impacted by any of those third variables.

The operationalization of variables is another factor to consider. All the studies used the CTS (e.g., either the 1979 or the 1996 version) to measure dating violence. Some researchers made some scoring adjustments, such as changing the 7-point likert scale to a 3-point scale (1 = *never*, 2 = *once or twice*, 3 = *many times*; Hendy et al., 2003) and combining both physical and sexual dating violence items into one variable (8 items for physical victimization and 1 for sexual; O'Keefe, 1998). Hendy and colleagues did not specify what type of violence they measured but most likely it was physical violence. Because the present study also used the CTS to measure physical dating violence victimization, this did not likely impact the differences in results between studies.

All of the previous studies that found support for the intergenerational transmission of violence for victimization used the CTS to measure the two exposure variables of witnessing interparental abuse and childhood abuse as well. In the current study the CTS was not used to measure the exposure variables. Hendy and colleagues (2003) continued to use their changed likert scale. One study used the CTS for measuring witnessing interparental abuse but not for child abuse (Jankowski et al., 1999).

They also only asked one question about physical child abuse, which focused on specific acts of violence. For the current study four items were created to measure witnessing interparental abuse, which are based on the distinction Straus and colleagues (1996) make between minor and severe violence. Even though the present study did not use the CTS to measure witnessing interparental abuse, it used similar questions as the other studies that support the intergenerational transmission of violence. Therefore, there appears to be more similarities than differences between how witnessing interparental abuse was operationalized across the studies, suggesting that the measurement of this variable did not likely affect the non-significant findings.

In the current study two questions from Briere's CMIS-SF measure (1992) were used to measure physical child abuse. One of them asked about specific acts of child abuse and the other one was a global question ("To the best of your knowledge, before age 17, were you ever physically abused?"). Again, the specific question is similar to the CTS physical abuse content while the general is not. However, the CTS includes several question about different minor and severe violent acts while the current study only included two questions all together. Overall, as for operationalization of witnessing interparental violence, operationalization of child abuse appear to be more similar than different across the studies, suggesting that this did not impact the differences in findings between the current study and previous studies.

More importantly, O'Keefe (1998) was the only study that had a sample size similar to that of the current study, but she focused on a subsample (i.e., 232 participants out of 1,012) that reported more severe violence exposure. She only included students who reported witnessing high levels of interparental abuse (i.e., at the 75th percentile of

higher) while the present study included females who have not witnessed interparental abuse as well as those who have. O'Keefe also asked participants to report on their worst year as children for the exposure variables. This suggests that a future study would benefit from either recruiting a larger sample or focus on a sample with more severe violence exposure.

Overall, in regards to operationalization of childhood exposure, there appears to be more similarities than differences in the measurement of the childhood exposure variables comparing the current studies and previous studies. Nevertheless, this study could have benefited from including a broader range of questions related to childhood exposure.

The statistical method used for the analyses as well as how the different variables were created can also impact the findings. Except for two studies (Hendy et al., 2003; Malik et al., 1997), the comparison studies dichotomized all variables. In Malik and colleagues' (1997) study the exposure variables were continuous while the dating violence variables were dichotomous (Malik et al., 1997). Hendy and colleagues (2003) used continuous variables. In the current study, the exposure variables were dichotomous and the physical victimization variable was continuous. All the comparison studies used regression analyses (either logistic or regular regression analysis). Overall, the present study used similar statistical methods as the other studies.

Nevertheless, there were some noteworthy differences between the current study and some of the other studies. Jankowski et al. (1999) created separate variables for witnessing interparental abuse based on which parent was the perpetrator (i.e., same sex parent, opposite sex parent, both parents, or none). More importantly, they controlled for

physical child abuse in their analyses while this study used physical child abuse as a predictor for victimization.

Taken together, a future study should include a larger sample size, expand on the childhood exposure measures, and administer the surveys in a more controlled setting. The current study could also have benefited from inclusion of participants with exposure to more severe violence.

Even though the findings of the current study did not find childhood exposure to be predictive of later physical victimization when averaging across violence types, there are some similarities to results from previous studies that have found support for the intergenerational transmission of violence. Previous studies have found an effect both for witnessing interparental abuse and being a victim of physical child abuse and subsequent physical dating violence victimization. Three studies found an effect for witnessing abuse and subsequent physical victimization (Hendy et al., 2003; Gover et al., 2008; Jankowski et al., 1999). However, Jankowski and colleagues (1999) found that witnessing both parents abuse each other predicted physical victimization for both female and male college students while the other two studies only found an effect for female college students. Gover and colleagues (2008) found that witnessing father-to-mother inflicted violence predicted physical victimization and Hendy and colleagues (2003) found that witnessing mother-to-father inflicted violence predicted physical victimization. In the current study witnessing interparental abuse predicted physical dating violence victimization in the post-hoc analyses (e.g., exposure to physical violence as a child and acceptance of physical violence were entered as predictors for physical victimization).

Since Jankowski and colleagues (1999) combined males and females in their analyses, it is difficult to compare their findings to the current study. Instead, one could argue that the differences in findings suggest that victimization is not the same for females and males. The other two studies found that witnessing interparental abuse predicted victimization (Hendy et al., 2003; Gover et al., 2008), as in the current study. These two studies found effects based on which parent inflicted the violence. The present study did not separate witnessing by perpetrator gender.

Two of the above-mentioned studies also found a link between childhood abuse and subsequent physical victimization (Hendy et al., 2003; Gover et al., 2008). Gover and colleagues (2008) found that physical child abuse was a significant predictor for physical and psychological victimization for females while Hendy and colleagues (2003) found that mother inflicted child abuse predicted victimization for both females and males. Other studies have found similar results. In Malik and colleagues' (1997) high school sample both males and females who reported being abused as children were more likely to report victimization than those without an abuse history. O'Keefe (1998) only found a link between physical child abuse and later victimization for females. The current study did not find evidence for physical child abuse predicting physical dating violence victimization. There could be several explanations for this such as the limited number of questions about childhood abuse in the present study compared to previous studies. It is possible that only those women who experienced more severe child abuse answered yes to the questions used in the present study, which means that women exposed to milder forms of child abuse were categorized with non-victims.

Since the current study did not find much evidence supporting the intergenerational transmission of violence, it would also be important to discuss other studies that have failed to find a link between childhood exposure and later victimization. In Lichter and McCloskey's (2004) longitudinal sample of adolescents, those who reported witnessing their father abuse their mother were not more likely to experience dating violence. In O'Keefe and Treister's (1998) study of the background-situational model with high school students, they did not find support for the intergenerational transmission of violence. O'Keefe and Treister included both witnessing interparental abuse and physical child abuse as predictors for physical victimization.

Lichter and McCloskey (2004) used a similar sample size (n = 208) as in the current study but their sample was different in many ways. They recruited mothers and their adolescent children to be part of a longitudinal study that focused on long-terms effects of intimate partner violence on children. They recruited both violent and non-violent mothers and their adolescents from the community. Since the researchers specifically targeted adolescents who grew up in violent homes, it is likely that their sample was exposed to more severe violence compared to the current sample. Moreover, they used the CTS to measure both childhood exposure and dating violence but they used weights to reflect differences in impact between male and female perpetrated dating violence. These weights were based on studies by Marshall (1992a, 1992b) with college students who reported "how serious, aggressive, abusive, threatening, and violent" different acts were based on whether the perpetrator was male or female (Lichter & McCloskey, 2004, p. 348). Moreover, in addition to the CTS items for measuring exposure to father-to-mother inflicted violence, Lichter and McCloskey used 7 more

violent items derived from talking to female victims and staff at domestic violence shelters. In addition to differences based on sample characteristics and measurements between Lichter and McCloskey's (2004) study and the current study, they used a longitudinal research design with in-person interviews. Overall, their study and the current study appear more dissimilar than similar.

O'Keefe and Treister's (1998) study was the second study that did not find support for the intergenerational transmission of violence. They included a much larger sample size than the current study (n = 939) and they recruited a high percentage of minority high school students (mostly Latino/a and African-American). O'Keefe and Treister reported findings from the same sample as O'Keefe (1998), but included the entire sample while O'Keefe focused on those who reported witnessing more severe violence between their parents. Interestingly, O'Keefe (1998) found support for physical child abuse and later victimization for females, but when including the entire sample O'Keefe and Treister did not find any effects for child abuse or witnessing. This suggests that the sample size of the current study was adequate but could have benefited from recruiting individuals reporting more severe violence exposure. An alternative recruiting method would be to sample a broader range of violent exposure instead of including so many participants with no violence exposure. Most of the women in the present study were not exposed to violence as children or as young adults. Also, those who reported exposure to violence as children or adults reported mostly exposure to minor acts of violence. A future study would benefit from including a broader range of violence exposure.

Perpetration. Even though the current study focused on physical dating violence victimization, it is beneficial to compare it to previous studies focusing on physical dating violence perpetration to further explore the limited support for the intergenerational transmission of violence in the current study. Three of the previously discussed studies that found evidence for childhood exposure and later victimization also investigated the effect of childhood exposure and later perpetration (Hendy et al., 2003; Malik et al., 1997; O'Keefe, 1998). Two studies found evidence for witnessing interparental abuse and perpetration while two found support for child abuse and perpetration. Both Malik and colleagues (1997) and Hendy and colleagues (2003) found that females were more likely to perpetrate violence if they had witnessed their mother abuse their father. In one study, this was true for males as well (Malik et al., 1997). In terms of childhood abuse, O'Keefe (1998) reported that females were more likely to report being perpetrators if they had been abused as children while Hendy and colleagues (2003) reported that males were more likely to report being perpetrators if they had been abused by their mothers as children.

Three additional studies that focused solely on perpetration also found support for the intergenerational transmission of violence (Foo & Margolin, 1995; Luthra & Gidycz, 2006; Riggs & O'Leary, 1996). Riggs and O'Leary (1996) found that witnessing interparental abuse predicted aggression against peers but not against dating partners. Likewise, being a victim of childhood abuse predicted aggression against peers but not against dating partners (Riggs & O'Leary, 1996). Foo and Margolin (1995) found evidence for both witnessing interparental abuse and child abuse. More specifically, witnessing parents abuse each other predicted male perpetration while child abuse

predicted female perpetration. However, Foo and Margolin found an effect for sexual child abuse but not physical. Lastly, Luthra and Gidycz (2006) found that females were more likely to perpetrate violence if they had been abused by their father as children.

The three additional studies described above that found some evidence for childhood exposure and later perpetration had fairly similar sample sizes compared to the current study. Riggs and O'Leary (1996) included almost twice as many participants (n = 375) but Foo and Margolin (1995) included 290 students and Luthra and Gidycz (2006) included 200 students. This suggests that the sample size in the current study would be adequate for investigating the intergenerational transmission of violence. However, the current study focused on victimization while the other three previous studies focused on perpetration. When comparing the current study to previous studies of victimization, one suggestion was to recruit a larger sample or focus on a subsample with more severe violence exposure. Since the three studies with similar sample sizes as the current study, which focused on perpetration instead of victimization found some support for both witnessing and child abuse and later dating violence, it is possible that childhood exposure to violence impacts physical dating violence perpetration and victimization differently.

In addition to the similar sample size, the three previously discussed studies of perpetration have more similarities than differences compared to the current study. They were all cross-sectional studies with college students. Two of them recruited mostly Caucasian students (Luthra & Gidycz, 2006; Riggs & O'Leary, 1996) while one included about 55% Caucasian students and the rest were minorities (mostly Asian-Americans; Foo & Margolin, 1995). The current study recruited only female college students while

these three studies recruited both male and female college students. Moreover, the previous three studies used the CTS to operationalize witnessing interparental abuse, child abuse, and dating violence perpetration, except Riggs and O'Leary (1996) who used the Family Violence Questionnaire (FVQ) to measure child abuse and witnessing interparental abuse. The FVQ asks more general questions as opposed to the CTS that asks about specific acts of violence. As discussed for the previous victimization studies, the present study could have benefited from including more questions about childhood exposure.

In terms of statistical methods, the current study used regression analyses, which two of the perpetration studies did as well. Again, the exception was Riggs and O'Leary (1996) who used a structural equation modeling technique. The current study differed from these three studies in regards to the research design. Similarly to the previous studies focusing on victimization, the three studies focusing on perpetration used a more controlled setting for data collection as opposed to the current study. All three studies administered their surveys in group settings while the current study administered them online. As previously discussed, the current study would have benefited from administering the questionnaires in a more control study to rule out potential third variables.

Acceptance. The current study hypothesized that childhood exposure would predict dating violence victimization and suggested that acceptance of dating violence would predict victimization after controlling for childhood exposure. As for the intergenerational transmission of violence, the current study also found limited evidence for acceptance of dating violence as a predictor for dating violence victimization. There

was no support for acceptance as a mediator between childhood exposure and later victimization. The current study will be compared to previous studies that have investigated childhood exposure, acceptance, and dating violence. First, the discussion will focus on victimization and then perpetration to try to explore why the current study found limited evidence for acceptance as a predictor of dating violence victimization.

Victimization. Few studies have looked at the relationship between acceptance of dating violence and dating violence victimization. One study focused on predicting perpetration but also reported that acceptance of perpetration of violence increased the odds of being a victim of physical dating violence (Malik et al., 1997). However, acceptance increased the odds of being a perpetrator more than being a victim. The only previous studies that have focused on predicting victimization by including acceptance as a predictor were done by O'Keefe and colleagues (O'Keefe, 1998; O'Keefe & Treister, 1998).

When only including participants who reported more severe exposure to witnessing their parents abuse each other, O'Keefe (1998) found that males who were more accepting of dating violence were also more likely to report being victims of dating violence. This was not the case for females. When including the larger sample of high school students, O'Keefe and Treister (1998) found that females who reported being more accepting of male-to-female violence were more likely to report being victims of dating violence. The findings in O'Keefe and colleagues' studies differed by gender, which suggests that victimization is not the same for females and males. In the current study, acceptance of female-to-male perpetrated physical violence predicted physical victimization for female college students. Logically it makes sense that women who are

being abused by their male partners would be more accepting of male perpetrated

violence, as the findings of O'Keefe and Treister's (1998) study support. The current

study found the opposite results. There could be several explanations for this. Some

could be related to methodological difference, which will be discussed below. The

women in the current study were more accepting of female perpetrated violence in

general, which could be because it is more socially acceptable for females than males to

be violent against their partners. Another contributing factor might be that most of the

victims were also perpetrators and it would make sense for female perpetrators to be

more accepting of female perpetration. A related explanation is that acceptance plays a

larger role for perpetrators than victims, which again would argue that victimization and

perpetration are separate experiences.

O'Keefe and colleagues (O'Keefe, 1998; O'Keefe & Treister, 1998) used a

different measure for acceptance of dating violence than the current study. They used

Margolin and Foo's (1992) A Justification of Violence Scale, which is an unpublished

measure. Both measures assess for acceptance of both male and female perpetrated

physical violence. However, in contrast to Price and Byers' (1999) measure, used in the

current study, Margolin and Foo's measure asks about acceptance of perpetrating

violence in situations that are either humiliating or when violence is used in self-defense.

Furthermore, Price and Byers' (1999) measure includes acceptance of physical, sexual,

and psychological violence and the measure asks more about specific acts of violence and

less so about specific context. The contexts included in Price and Byers' (1999) measure

involve perpetrating violence because the partner cheated or is intoxicated or because of

jealousy or love. Price and Byers' (1999) measure also have more items (39 for male

perpetrated violence and 37 for female perpetrated violence) compared to Margolin and Foo's measure (8 for each perpetrator type). The number of items is more similar when only focusing on acceptance of physical violence as Price and Byers' (1999) measure included 12 items for each perpetrator type for the acceptance of physical violence scale. Foo and Margolin (1995) refer to their measure as The Attitudes About Dating Index and report that the original version has 24 items for each perpetrator (i.e., males and females). Overall, the many differences between the acceptance measures make it difficult to compared findings across the studies.

Another difference between the current study and O'Keefe and Treister's (1998) study was related to the statistical methods. O'Keefe and Treister used a multiple regression analysis in which they entered all predictors simultaneously while the current study used a hierarchical regression analysis in which the exposure variables were entered in the first step and acceptance of dating violence in the second step. In other words, the current study controlled for childhood exposure to determine if acceptance added any additional predictability of victimization. Moreover, O'Keefe and Treister included fifteen predictors in their study but the current study focused on 3 predictors. Even though O'Keefe and Treister included the same predictors as the current study (witnessing interparental abuse, child abuse, and acceptance) they did not control for the effects of childhood exposure and included many more predictors.

Overall, there are many differences between the current study and the two previous studies that have looked at childhood exposure to violence, acceptance, and victimization. Therefore, it is difficult to determine what might have impacted the differences in outcomes.

Perpetration. The current study found limited support for acceptance of dating violence as a predictor for dating violence victimization and as discussed above, few studies have looked at acceptance and victimization. Therefore, studies investigating acceptance and perpetration will also be discussed to further compare and contrast the current study with previous studies. Even though more studies have investigated the relationship between acceptance and perpetration than acceptance and victimization, the research is still limited. Two studies reported correlations and odds ratios. In Price and Byers's (1999) correlational study, they found that high school students were more accepting of the type of violence they had perpetrated. Students who reported perpetrating physical violence were also more accepting of physical perpetration. Malik and colleagues (1997) found that acceptance of violence increased the odds of reporting being a perpetrator of physical violence. Moreover, as for victimization, O'Keefe (1998) found that acceptance of dating violence predicted dating violence perpetration for males but not for females.

Five additional studies have investigated the relationship between acceptance of dating violence and perpetration. Three of them were previously compared to this study in terms of the intergenerational transmission of violence (Foo & Margolin, 1995; Lichter & McCloskey, 2004; Riggs & O'Leary, 1996). In two of the previous studies acceptance of dating violence predicted physical perpetration for both male and female college students (Foo & Margolin, 1995; Riggs & O'Leary, 1996). In a longitudinal study by Foshee et al. (2001), they found that high school students were more likely to perpetrate violence if they reported being more accepting of dating violence. At baseline, this was true for predicting female perpetration but at the 1-year follow-up acceptance predicted

male perpetration. Moreover, Lichter and McCloskey (2004) found that acceptance of male-to-female perpetrated violence predicted dating violence perpetration while Josephson and Proulx (2008) found an effect for acceptance of female-to-male violence and perpetration. Both studies reported the same results for males and females.

The current study measured acceptance of dating violence using Price and Byers' (1999) measure. Two other studies that examined dating violence perpetration used the same measure. Josephson and Proulx (2008) created a shorter version of the original scale, which had 6 items for each type of violence (i.e., 18 items for male perpetration and 18 for female perpetration). The researchers did not specify which items they included in their study. Interestingly both the current study and Josephson and Proulx's (2008) study found that acceptance of female-to-male perpetrated physical violence predicted physical dating violence even though this study focused on victimization while Josephson and Proulx focused on perpetration. Josephson and Proulx also found an indirect effect of acceptance of male-to-female violence with greater acceptance predicting psychological perpetration, which predicted physical perpetration for both males and females. Josephson and Proulx used a similar sample size to the current study (n = 290) but they recruited high school males and females while the current study focused on female college students. Their study was also cross-sectional but they used a SEM while the current study used a hierarchical regression analysis. Also, Josephson and Proulx did not include any childhood exposure variables in their model instead they included variables about knowledge about abuse, self-efficacy, and the use of non-violent conflict strategies. Taken together, the numerous differences between the present study and Josephson and Proulx's study make it difficult to compare the two.

The other perpetration study using Price and Byers' (1999) measure was Luthra and Gidycz's (2006) cross-sectional study with male and female college students. They did not find support for acceptance as a predictor of perpetration. In contrast to the current study, Luthra and Gidycz included dating violence victimization as a predictor for perpetration and they reported that victimization was a strong predictor for perpetration for both males and females. The effect was the strongest for females. Since the current study found a strong correlation between victimization and perpetration, it is likely that perpetration would be a strong predictor for victimization and that acceptance of female-to-male violence would become a non-significant predictor if perpetration were added as a predictor.

The four perpetration studies that also included acceptance of dating violence as a predictor operationalized acceptance differently compared to the current study. Two of them used Margolin and Foo's The Attitudes About Dating Index (Foo & Margolin, 1995; Lichter & McCloskey, 2004). Both studies only used 12 out of the 24 items but they used different items. Foo and Margolin focused on situation relating to self-defense and humiliation. Lichter and McCloskey did not clarify which items they used. Moreover, the remaining two studies used different measures. Riggs and O'Leary (1996) used their own measure (AVQ), which consists of three items for each perpetrator (e.g., acceptance of pushing, slapping, punching). Lastly, Foshee and colleagues (2001) 8 items that they named Prescribed Dating Violence Norms to measure acceptance. Six out of the 8 items referred to male perpetration and only 2 referred to female perpetration. Nevertheless, these items were actually similar to the measure used in the current study even though Foshee and colleagues only included acceptance of physical violence.

Overall, with the exception of Foshee and colleagues' (2001) study, operationalization of acceptance differed between the current study and the other perpetration studies.

Since Foshee and colleagues' (2001) study measured acceptance similarly as the current study, the two studies will be compared based on research methodology. Foshee and colleagues recruited a larger sample (n = 1,013) and included both male and female high school students. They used a longitudinal study design and logistic regression analyses. Acceptance predicted female perpetration at baseline and male perpetration at the 1-year follow up. The researchers did not separate acceptance of male and female perpetrated violence. Overall, Foshee and colleagues' study appear to be more dissimilar than similar to the current study.

As for the victimization studies that included acceptance as a predictor, the perpetration studies were more dissimilar than similar to the current study, which makes it difficult to compare the findings. The findings from the studies that investigated the intergenerational transmission of violence suggest that future studies should include more items for childhood exposure and administer the surveys in a more controlled setting. A future study should also either include a larger sample or focus on more severe violence exposure. Nevertheless, some of the perpetration studies that used similar sample sizes as the current study found support for the intergenerational transmission of violence (Foo & Margolin, 1995; Luthra & Gidycz, 2006), which suggest that exposure to violence in childhood might influence dating violence victimization and perpetration differently. Victimization might be very different from perpetration in general.

The intergenerational transmission of violence theory suggests that being exposed to violence as a child increases the risk for experiencing dating violence. In other words,

instrumental learning can explain how children exposed to interpersonal violence learn to be violent themselves. In the current study it was proposed that attitudes such as acceptance of dating violence might explain that relationship as children who been exposed to violence have normalized the occurrence of violence in intimate relationships. The acceptance variable was conceptualized as a cognitive variable that might differentiate children who were exposed to violence and later experiences dating violence compared to those who did not. It is possible that cognitive factors such as acceptance play a greater role in predicting perpetration than victimization.

Other researchers have discussed the normalization of violence in people who grow up in violent families. Straus and colleagues (Straus, Gelles, & Steinmetz, 1980; Straus, & Yodanis, 1996) have discussed the normalization of violence in the context of corporal punishment and intimate partner abuse. The researchers argue that when parents use physical punishment to correct their children's behaviors then the children learn that violence is a good and acceptable strategy to deal with conflict. Straus and Yodanis state that "normative approval of violence is based on the assumption that corporal punishment teaches children that when someone misbehaves and won't listen to reason, it is appropriate to hit them" (1996, p. 827). According to Straus and Yodanis (1996), children who are physically punished as children are more likely to be violent with other children as well as their partners when they grow up because they have learned to use violence to solve conflict. Furthermore, physically punished children have limited exposure to non-violent strategies for dealing with conflict and are therefore limited in these skills. Because they are limited in their conflict management skills, they are more likely to use violence in their relationships, which reinforces what they learned as children (e.g.,

violence is a good way to end a conflict). Straus and Savage (2005) made similar arguments for people who have been neglected as children. They found that college students that were neglected as children were more likely to perpetrate dating violence.

Straus and colleagues' (Straus et al., 1980; Straus, & Yodanis, 1996) hypothesis that interpersonal violence is normalized for children growing up in violent homes seems to explain perpetration fairly well. However, it is unclear if the dynamics of perpetration are the same as for victimization. Victims do not necessarily learn that violence works or that violence is a good conflict strategy. It is possible that some victims may believe that violence is a normal part of an intimate relationship. They might also have limited conflict management skills. However, in the current study childhood exposure was not a strong predictor of dating violence victimization. One explanation could be that some of the women who were exposed to violence as children developed a negative reaction to interpersonal violence (e.g., less acceptable) and are therefore less likely to being with a dating partner who is violent. If they are in a violent relationship, they might end it because they have not normalized the violence they were exposed to as children. They are actually not accepting violence as a normal part of an intimate relationship. Another issue is that a substantially greater number of women reported being victims and perpetrators of dating violence than those exposed to violence as children. In other words, a proportion of the women were not exposed to childhood violence but they were victimized. This finding is consistent with other studies as researchers have reported high proportions of dating violence in young samples (e.g., high school and college samples) while the proportion that were exposed as children is smaller. This might explain why childhood exposure is not a strong predictor of victimization.

Limitations

There are several limitations with the current study. The effect sizes were small and the power was low, which increases the risk for Type II errors. In other words, the current study might have missed an effect that was present because of the increased chance of false negatives. A future study should recruit a larger sample or focus on a sample with more severe violence exposure to increase power and hopefully effect sizes as well.

The exclusion of males could be considered both a limitation and an advantage of the present study. Only female college students were recruited because few studies have looked at victimization and previous studies have found that females report more victimization compared to males (Follingstad et al, 1991; Gover et al., 2008; Lichter & McCloskey, 2004; Whitaker et al., 2007). Females have also reported more negative outcomes related to dating violence compared to males (Follingstad et al., 1991; Kaura & Lohman, 2007; Molidor & Tolman, 1998; O'Keefe & Treister, 1998). Focusing on females could be an advantage because so few studies have explored risk factors for victimization. However, the exclusion of males could also be considered a limitation because the findings cannot be generalized to males.

Moreover, the current sample was mostly Caucasian and all participants were college students. Even though previous studies have found high proportions of dating violence in college students (Straus, 2004), the results from the current study cannot necessarily be generalized to other ethnicities and non-college students. College students are in general considered a highly functional and healthy sample.

Another limitation with the current study was the operationalization of the exposure variables. A future study should expand on the items measuring witnessing interparental abuse and child abuse. Moreover, witnessing interparental abuse was only related to witnessing physical violence with the assumptions of a general effect of being exposed to any kind of violence as a child. However, the current study found a more specific effect, which suggests that future studies should ask about several types of violence (e.g., physical, sexual, and psychological). Moreover, the present study only focused on dating violence victimization in the past year. It is possible that women coded as non-victims were exposed to dating violence prior to that time frame.

The current study used self-reports and retrospective recall of violence experiences, which further limits the findings. Also, the use of online questionnaires administration limited internal validity and therefore future studies should administer the questionnaires in a more controlled setting. This might also limit the proportion of missing data, which was another limitation with the current study. Several of the variables had more than 5% of missing data (e.g., the acceptance and dating violence variables) and even though the results from the regression analyses were similar with and without missing data, a future study would benefit from limiting the amount of missing data.

Another limitation was the violations of assumptions. Several of the variables were not normally distributed as there were more participants who reported no violence or few violent experiences, which impacted the assumptions of linearity of residuals and homoscedasticity. These assumptions were violated even after transforming the non-normally distributed variables and therefore the non-transformed variables were used in

the study. However, a future study might benefit from recruiting a broader range of violent experiences.

Future Studies

Future studies examining the variables of the present study would benefit from administering the surveys in a more controlled setting. They should also recruit a broader range of violence exposure experiences or focus on more severe violence exposure. Since few studies have investigated childhood exposure as a predictor for dating violence victimizations, future studies should continue focusing on females or males separately to better understand the risk factors and potential mediators and moderators. Moreover, several studies have found different results for males and females, which suggests that future studies should not assume that violence exposure and dating violence are the same for males and females.

Future studies could benefit from several measurement considerations. More questions should be asked about childhood exposure to violence. Witnessing interparental abuse should include physical, sexual, and psychological violence. Also, additional questions should be asked to investigate if childhood exposure to violence normalizes violence in interpersonal relationships. Future studies should ask participants how normal or common they perceive different violent acts to be in an intimate relationship. Participants could also be asked about the perceived impact of being exposed to violence as a child as well as in dating relationships. It is possible that acceptance of dating violence is not a significant predictor because they do not think the violence is impacting them negatively (e.g., mild violence at low frequency).

Another measurement consideration for future studies relates to how acceptance is measured. The present study measured childhood exposure and dating violence victimization by asking women about their personal experiences (e.g., acts of violence that they were victims to). However, acceptance of dating violence was measured by asking general questions about how acceptable certain acts of violence are perceived to be. Future studies might benefit from having victims rate how acceptable they are of their own victimization (e.g., the perpetration acts they have experienced). Future studies would also benefit from defining the construct of acceptance. To date, no studies have clearly defined what acceptance is and what it is not.

Moreover, the current study asked about dating violence experiences but did not ask if they were still in that relationship. It is possible that some of the women who experiences abuse ended the relationship because they did not accept the violence. A future study should ask about contextual factors such as if they are still dating the perpetrator.

The current study found higher correlations between perpetration and acceptance than between victimization and perpetration (see Table 4) suggesting that acceptance of dating violence is a better predictor for perpetration than victimization. A related issue is the high correlation between victimization and perpetration, which makes it difficult to investigate risk factors for victimization without discussing the fact that most victims are also perpetrators. At least for college students, it seems like victimization rarely occurs independent of perpetration. A future study would benefit from asking about the context of the violent acts to better understand situational factors that might impact victimization versus perpetration.

Furthermore, in the current study it was assumed that acceptance of dating violence occurred after being exposed as a child but before experiencing dating violence. It is possible that people become more or less accepting based on their dating experiences and not because of childhood exposure.

Conclusions

The present study aimed to understand how childhood exposure to violence might lead to becoming a victim of physical dating violence. Previous studies have found evidence for childhood exposure increasing the risk for later dating violence exposure (Gover et al., 2008; Hendy et al., 2003; Jankowski et al., 1999; O'Keefe, 1998; Riggs & O'Leary, 1996) but most of them have focused on predicting perpetration. Children who have been abused or have witnessed their parents abuse each other learn that conflict can be solved by using violence (e.g., instrumental learning). The assumption behind the current study was that the research on perpetration would translate into victimization. In other words, it was predicted that women who were exposed to violence as children would be more likely to become victims of physical dating violence.

Additionally, the current study predicted that cognitive factors such as acceptance of violence would predict victimization above and beyond childhood exposure. Acceptance of dating violence was also hypothesized to mediate the relation between childhood exposure and subsequent dating violence. Initially, the present study predicted a general or global impact of violence exposure such that being exposed to any kind of violence as a child would increase the risk of becoming a victim of physical violence. The data did not support this hypothesis. The findings from the current study showed a more specific impact of being exposed to physical violence as a child predicting being a

victim of physical violence as an adult. Similar results were found for sexual and psychological violence. When specifying types of violence, acceptance of dating violence was a significant predictor but it did not mediate the relation between childhood exposure and subsequent dating violence victimization.

There are several important contributions of the present study to the research on intimate partner violence among young adults. One is the focus on victimization, as most of the previous studies have focused on perpetration. A common assumption is that the dynamics of perpetration is the same for victimization. However, previous studies report different results for perpetrators and victims, suggesting that they are qualitatively different. The findings from the current study further suggest that victimization is not the same as perpetration. The intergenerational transmission of violence theory, which builds on Bandura's (1977) social learning theory, propose that children who are exposed to interpersonal violence learn to be violent towards others. In other words, experiences with violence teach children to become perpetrators because they do what they saw worked as a conflict management strategy. Violence has the potential to end the conflict and give perpetrators the outcome they want. Children who see these are arguably more likely to use violence themselves to solve conflict. It is not necessarily the same for victims. The current study found limited support for the intergenerational transmission for victimization, suggesting that the relation between childhood exposure to violence and dating violence victimization is more complex than for perpetration.

Related to the contribution of focusing on victimization is the focus on women. The present study sampled women only because previous studies have shown higher rates of victimization (Follingstad et al, 1991; Gover et al., 2008; Lichter & McCloskey, 2004;

Whitaker et al., 2007) and more negative outcomes related to female victimization than male victimization (Follingstad et al., 1991; Molidor & Tolman, 1998; O'Keefe & Treister, 1998). Previous dating violence studies have also found different results for females and males (Foo & Margolin, 1995; Hendy et al., 2003; Gover et al., 2008; Luthra & Gidycz, 2006; O'Keefe, 1998; O'Keefe & Treister, 1998), suggesting that they experience dating violence differently. The present study highlights the need of at least not assuming that dating violence is the same for females and males. With the limited research on victimization and the mixed findings for males and females, it is important to study them separately. Moreover, the adult domestic violence research has shown that women are more likely to be victims than men (Dobash et al., 1992). If victimization among younger samples of women could be better understood then that could increase the understanding of domestic violence victimization.

Another contribution of the present study was the evidence for a more specific effect as opposed to a global effect of childhood exposure. It was predicted that childhood exposure to any type of interpersonal violence would increase the chance of being a victim of physical violence. The findings did not support that hypothesis but instead there was evidence for a more specific effect such that exposure to physical violence increased the risk of being physically victimized.

Additionally, the present study predicted that attitudes such as acceptance of violence would increase the likelihood of physical victimization. Even though the support for acceptance as a predictor was limited, it is important to recognize that cognitive factors can play a role predicting behaviors such as dating violence. The intergenerational transmission of violence theory shows evidence for instrumental

learning in being a perpetrator (with some limited evidence for becoming a victim) but the findings from the current study suggest that cognitive factors such as acceptance can influence that process. This relates to Straus and colleagues' (Straus et al., 1980; Straus, & Yodanis, 1996) research on how children growing up in violent homes normalize or become more tolerant of violence.

The findings from the present study are informative for prevention program of dating violence. Prevention programs should incorporate information on perpetration and victimization as well as the bidirectionality of dating violence. Adolescents and young adults could also benefit from learning about healthy relationships since those exposed to violence as children are likely to lack non-violent conflict management skills. They could benefit from learning alternative ways to solve conflict.

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Appendix A

Table 1

Means, Standard deviations, and Range for Child Psychological Abuse.

Items	*n*	*M*	*SD*	*range*
Yell	189	3.39	2.07	0-6
Insult	189	1.23	1.82	0-6
Criticize	189	2.31	2.10	0-6
Guilty	187	2.39	2.00	0-6
Humiliate	188	.85	1.46	0-6
Embarrass	188	1.62	1.73	0-6
Bad	189	1.20	1.68	0-6
Total	185	13.03	10.18	0-42

Note: M = mean; *SD* = standard deviation. Scale from 0 (*never*) to 6 (*over 20 times a year*). Participants were considered psychologically abused as children if they had a score of 21 or higher (75th percentile).

Table 2

Means, Standard deviations, and Range for Acceptance of Dating Violence.

_____

Measures	n	M	SD	range
_____
AMDV-Psyc	180	25.57	6.90	15-61
AMDV-Phys	180	15.09	4.41	12-32
AMDV-Sex	183	15.54	4.31	12-35
AMDV-Total	172	56.39	12.67	39-106
AFDV-Psyc	177	20.63	6.82	13-40
AFDV-Phys	180	20.86	7.83	12-41
AFDV-Sex	177	17.46	5.74	12-39
AFDV-Total	168	58.98	16.62	37-111
Accept/psyc	172	46.10	11.89	28-81
Accept/phys	174	36.04	10.32	24-67
Accept/sex	174	33.07	9.03	24-71
Acceptance	155	115.68	26.45	77-213

_____

Note: M = mean; *SD* = standard deviation. AMDV = Attitudes Towards Male Dating Violence; AFDV = Attitudes Towards Female Dating Violence; Psyc = psychological violence; Phys = physical violence; Sex = sexual violence; Accept/psyc = AMDV-Psyc and AFDV- Psyc combined; Accept/phys = AMDV-Phys and AFDV- Phys combined; Accept/sex = AMDV-Sex and AFDV-Sex combined; Acceptance = AMDV-Total and AFDV-Total combined. Scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

Table 3

Means, Standard deviations, and Range for Dating Violence Victimization and Perpetration.

Measures	Victimization				Perpetration		
	n	*M (SD)*	*range*		*n*	*M (SD)*	*range*
Physical							
Minor	170	1.16 (3.46)	0-26		168	1.19 (2.62)	0-18
Severe	177	.30 (1.09)	0-9		177	.28 (.83)	0-6
Total	164	1.50 (4.47)	0-34		163	1.53 (3.11)	0-20
Sexual							
Minor	168	1.72 (3.31)	0-16		176	.92 (2.22)	0-12
Severe	179	.14 (1.13)	0-12		182	.02 (.17)	0-2
Total	163	1.80 (3.69)	0-23		173	.95 (2.25)	0-12
Psychological							
Minor	156	5.87 (6.15)	0-24		161	6.42 (6.05)	0-23
Severe	172	1.03 (2.65)	0-16		173	.97 (1.87)	0-11
Total	153	6.88 (8.14)	0-40		156	7.27 (7.30)	0-28

Note: M = mean; *SD* = standard deviation. Minor = minor violence as defined by Straus et al. (1996); Severe = severe violence as defined by Straus et al. (1996). Scale from 0 (*this has never happened*) to 7 (*not in the past year, but happened before*) with values in between ranging from 1 (*once in the past year*) to 6 (*more than 20 times in the past year*).

Table 4

Correlations for Exposure Variables, Acceptance Variables, and Dating Violence Victimization and Perpetration.

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Witnessing	1															
2. Child physical	.38***	1														
3. Child sexual	.08	.13	1													
4. Child psych	.25***	.30***	.09	1												
5. Accept/phys	.09	.03	-.01	.11	1											
6. Accept/sex	.03	-.08	.08	-.06	.52***	1										
7. Accept/psyc	.15	.05	.04	.04	.56***	.56***	1									
8. AMDV	.12	.03	.07	-.02	.62***	.75***	.80***	1								
9. AFDV	.10	.00	.04	.08	.84***	.71***	.77***	.61***	1							
10. Acceptance	.11	.01	.08	.06	.82***	.81***	.87***	.87***	.92***	1						
11. Phys/victim	.18*	.01	.15	.17*	.15	.04	.14	.09	.17*	.13	1					
12. Sex/victim	.24**	.21**	.24**	.18*	.09	.11	.15	.21*	.09	.14	.62***	1				
13. Psyc/victim	.08	.05	.21*	.30***	.16	.04	.25**	.17*	.17*	.18*	.68***	.57***	1			
14. Phys/perp	.06	-.02	.05	.14	.26**	.16*	.29***	.23**	.32***	.28**	.69***	.29***	.56***	1		
15. Sex/perp	.11	.15*	.12	.03	.05	.12	.16*	.22**	.06	.14	.22**	.67***	.27***	.22**	1	
16. Psyc/perp	.04	.10	.10	.25**	.22**	.06	.28**	.18*	.24**	.23**	.56***	.49***	.92***	.62***	.31***	1

Note. * p < .05. ** p < .01. *** p < .001. Witnessing = witnessing interparental abuse; Child physical = child physical abuse; Child sexual = child sexual abuse; Child psych = child psychological abuse; Accept/phys = AMDV-Phys and AFDV - Phys combined; Accept/sex = AMDV-Sex and AFDV-Sex combined; Accept/psyc = AMDV-Psyc and AFDV- Psyc combined; AMDV = Attitudes Towards Male Dating Violence; AFDV = Attitudes Towards Female Dating Violence; Acceptance = AMDV-Total and AFDV-Total combined; Phys = physical violence; Sex = sexual violence; Psyc = psychological violence; perp = perpetrator.

Table 5

Hierarchical Regression Model to Assess the Relation Between Witnessing Interparental Abuse, Child Abuse, Acceptance of Dating Violence, and Physical Dating Violence Victimization (N= 189)

Steps	*B*	*SE(B)*	β	Step ΔR^2
Regression Analysis (DV: **Victimization**)				
Step 1 – Main Effect				.04
Witnessing	2.14	1.11	.17	
Child Abuse	.61	.92	.06	
Step 2 – Main Effect				.01
Acceptance Total	.02	.01	.11	

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. Acceptance Total = AMDV-Total and AFDV-Total combined (AMDV = Attitudes Towards Male Dating Violence; AFDV = Attitudes Towards Female Dating Violence).

Table 6

Hierarchical Regression Model to Assess the Relation Between Witnessing Interparental Abuse, Child Abuse, Acceptance of Dating Violence, and Physical Dating Violence Victimization (N= 189)

Steps	*B*	*SE(B)*	β	Step Δ R^2
Regression Analysis (DV: **Victimization**)				
Step 1 – Main Effect				.04
Witnessing	2.14	1.05	.17*	
Child Abuse	.61	.87	.06	
Step 2 – Main Effect				.01
AMDV	.02	.03	.07	

Note. * *p* < .05. ** *p* < .01. *** *p* < .001. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. AMDV = Attitudes Towards Male Dating Violence.

Table 7

Hierarchical Regression Model to Assess the Relation Between Witnessing Interparental Abuse, Child Abuse, Acceptance of Dating Violence, and Physical Dating Violence Victimization (N= 189)

Steps	*B*	*SE(B)*	β	Step ΔR^2
Regression Analysis (DV: **Victimization**)				
Step 1 – Main Effect				.04
Witnessing	2.14	1.07	.17*	
Child Abuse	.61	.89	.06	
Step 2 – Main Effect				.02
AFDV	.04	.02	.16	

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. AFDV = Attitudes Towards Female Dating Violence.

Table 8

Regression Analyses to Assess Acceptance of Dating Violence as Mediator in the Relation Between Exposure to Violence (Witnessing Interparental Abuse and Child Abuse) and Physical Dating Violence Victimization (N= 189)

Regression Analyses	*B*	*SE(B)*	β	Step Δ R^2
Exposure predicting Victimization				.04*
Witnessing	2.14	1.01	.17*	
Child Abuse	.61	.84	.06	
Exposure predicting Acceptance				.01
Witnessing	7.68	6.25	.10	
Child Abuse	1.63	5.17	.03	
Acceptance predicting Victimization				.02
Acceptance Total	.02	.01	.13	
Exposure and Acceptance predicting Victimization				.05
Witnessing	1.99	1.11	.16	
Child Abuse	.58	.92	.06	
Acceptance Total	.02	.01	.11	

Note. * *p* < .05. ** *p* < .01. *** *p* < .001. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. Acceptance Total = AMDV-Total and AFDV-Total combined (AMDV = Attitudes Towards Male Dating Violence; AFDV = Attitudes Towards Female Dating Violence).

Table 9

Regression Analyses to Assess Acceptance of Dating Violence as Mediator in the Relation Between Exposure to Violence (Witnessing Interparental Abuse and Child Abuse) and Physical Dating Violence Victimization (N= 189)

Regression Analyses	*B*	*SE(B)*	β	Step ΔR^2
Exposure predicting Victimization				.04*
Witnessing	2.14	1.01	.17*	
Child Abuse	.61	.84	.06	
Exposure predicting Acceptance				.02
Witnessing	4.34	2.83	.12	
Child Abuse	.21	2.35	.01	
Acceptance predicting Victimization				.01
AMDV	.03	.03	.09	
Exposure and Acceptance predicting Victimization				.04
Witnessing	2.03	1.06	.16	
Child Abuse	.61	.87	.06	
AMDV	.02	.03	.07	

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. AMDV = Attitudes Towards Male Dating Violence.

Table 10

Regression Analyses to Assess Acceptance of Dating Violence as Mediator in the Relation Between Exposure to Violence (Witnessing Interparental Abuse and Child Abuse) and Physical Dating Violence Victimization (N= 189)

Regression Analyses	B	SE(B)	β	Step Δ R^2
Exposure predicting Victimization				.04
Witnessing	2.14	1.01	.17*	
Child Abuse	.61	.84	.06	
Exposure predicting Acceptance				.01
Witnessing	4.41	3.78	.09	
Child Abuse	.68	3.13	.02	
Acceptance predicting Victimization				.03*
AFDV	.05	.02	.17*	
Exposure and Acceptance predicting Victimization				.06*
Witnessing	1.95	1.06	.15	
Child Abuse	.59	.88	.06	
AFDV	.04	.02	.16	

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. AFDV = Attitudes Towards Female Dating Violence.

Table 11

Hierarchical Regression Model to Assess the Relation Between Witnessing
Interparental Abuse, Child Physical Abuse, Acceptance of Physical Dating Violence,
and Physical Dating Violence Victimization (N= 189)

Steps	B	SE(B)	β	Step Δ R^2
Regression Analysis (DV: *Victimization*)				
Step 1 – Main Effect				.04
Witnessing	2.64	1.10	.21*	
Child Physical Abuse	-.93	1.23	-.07	
Step 2 – Main Effect				.02
Accept/phys	.06	.04	.14	

Note. * *p* < .05. ** *p* < .01. *** *p* < .001. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. Accept/phys = AMDV-Phys and AFDV- Phys combined (AMDV = Attitudes Towards Male Dating Violence; AFDV = Attitudes Towards Female Dating Violence; Phys = physical violence).

Table 12

Hierarchical Regression Model to Assess the Relation Between Witnessing Interparental Abuse, Child Physical Abuse, Acceptance of Physical Dating Violence, and Physical Dating Violence Victimization (N= 189)

Steps	*B*	*SE*(*B*)	β	Step Δ R^2
Regression Analysis (DV: **Victimization**)				
Step 1 – Main Effect				.04
Witnessing	2.64	1.09	.21*	
Child Physical Abuse	-.93	1.21	-.07	
Step 2 – Main Effect				.00
AMDV-Phys	.00	.08	.00	

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. AMDV = Attitudes Towards Male Dating Violence; Phys = physical violence.

Table 13

Hierarchical Regression Model to Assess the Relation Between Witnessing Interparental Abuse, Child Physical Abuse, Acceptance of Physical Dating Violence, and Physical Dating Violence Victimization (N= 189)

Steps	B	$SE(B)$	β	Step ΔR^2
Regression Analysis (DV: *Victimization*)				
Step 1 – Main Effect				.04
Witnessing	2.64	1.08	.21*	
Child Physical Abuse	-.93	1.20	-.07	
Step 2 – Main Effect				.04*
AFDV-Phys	.11	.04	.20*	

Note. ***** $p < .05$. ****** $p < .01$. ******* $p < .001$. B = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. AFDV = Attitudes Towards Female Dating Violence; Phys = physical violence.

Table 14

Hierarchical Regression Model to Assess the Relation Between Witnessing Interparental Abuse, Child Sexual Abuse, Acceptance of Sexual Dating Violence, and Sexual Dating Violence Victimization (N= 189)

Steps	*B*	*SE*(*B*)	β	Step Δ R^2
Regression Analysis (DV: **Victimization**)				
Step 1 – Main Effect				.11***
Witnessing	2.36	.82	.23**	
Child Sexual Abuse	2.24	.80	.22**	
Step 2 – Main Effect				.01
Accept/sex	.04	.03	.09	

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. Accept/sex = AMDV-Sex and AFDV-Sex combined (AMDV = Attitudes Towards Male Dating Violence; AFDV = Attitudes Towards Female Dating Violence; Sex = sexual violence).

Table 15

Hierarchical Regression Model to Assess the Relation Between Witnessing Interparental Abuse, Child Sexual Abuse, Acceptance of Sexual Dating Violence, and Sexual Dating Violence Victimization (N= 189)

Steps	B	$SE(B)$	β	Step ΔR^2
Regression Analysis (DV: **Victimization**)				
Step 1 – Main Effect				.11***
Witnessing	2.36	.80	.23**	
Child Sexual Abuse	2.24	.77	.22**	
Step 2 – Main Effect				.02*
AMDV-Sex	.13	.06	.15*	

Note. ***** *p* < .05. ****** *p* < .01. ******* *p* < .001. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. AMDV = Attitudes Towards Male Dating Violence; Sex = sexual violence.

Table 16

Hierarchical Regression Model to Assess the Relation Between Witnessing Interparental Abuse, Child Sexual Abuse, Acceptance of Sexual Dating Violence, and Sexual Dating Violence Victimization (N= 189)

Steps	*B*	*SE(B)*	β	Step Δ R^2
Regression Analysis (DV: **Victimization**)				
Step 1 – Main Effect				.11***
Witnessing	2.36	.81	.23**	
Child Sexual Abuse	2.24	.79	.22**	
Step 2 – Main Effect				.00
AFDV-Sex	.03	.05	.05	

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. AFDV = Attitudes Towards Female Dating Violence; Sex = sexual violence.

Table 17

Hierarchical Regression Model to Assess the Relation Between Witnessing Interparental Abuse, Child Psychological Abuse, Acceptance of Psychological Dating Violence, and Psychological Dating Violence Victimization (N= 189)

Steps	*B*	*SE(B)*	β	Step ΔR^2
Regression Analysis (DV: *Victimization*)				
Step 1 – Main Effect				.09**
Witnessing	.11	1.93	.01	
Child Psychological Abuse	5.55	1.57	.30**	
Step 2 – Main Effect				.06**
Accept/psyc	.16	.05	.24**	

Note. * *p* < .05. ** *p* < .01. *** *p* < .001. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. Accept/psyc = AMDV-Psyc and AFDV- Psyc combined (AMDV = Attitudes Towards Male Dating Violence; AFDV = Attitudes Towards Female Dating Violence; Psyc = psychological violence).

Table 18

Hierarchical Regression Model to Assess the Relation Between Witnessing Interparental Abuse, Child Psychological Abuse, Acceptance of Psychological Dating Violence, and Psychological Dating Violence Victimization (N= 189)

Steps	B	SE(B)	β	Step ΔR^2
Regression Analysis (DV: *Victimization*)				
Step 1 – Main Effect				.09**
Witnessing	.11	1.89	.01	
Child Psychological Abuse	5.55	1.53	.30***	
Step 2 – Main Effect				.06**
AMDV-Psyc	.29	.09	.25**	

Note. ***** *p* < .05. ****** *p* < .01. ******* *p* < .001. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. AMDV = Attitudes Towards Male Dating Violence; Psyc = psychological violence.

Table 19

Hierarchical Regression Model to Assess the Relation Between Witnessing Interparental Abuse, Child Psychological Abuse, Acceptance of Psychological Dating Violence, and Psychological Dating Violence Victimization (N= 189)

Steps	*B*	*SE(B)*	β	Step ΔR^2
Regression Analysis (DV: ***Victimization***)				
Step 1 – Main Effect				.09**
Witnessing	.11	1.91	.01	
Child Psychological Abuse	5.55	1.55	.30***	
Step 2 – Main Effect				.03*
AFDV-Psyc	.22	.10	.18*	

Note. ***** *p* < .05. ****** *p* < .01. ******* *p* < .001. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. AFDV = Attitudes Towards Female Dating Violence; Psyc = psychological violence.

Table 20

Regression Analyses to Assess Acceptance of Dating Violence as Mediator in the Relation Between Exposure to Violence (Witnessing Interparental Abuse and Physical Child Abuse) and Physical Dating Violence Victimization (N= 189)

Regression Analyses	B	SE(B)	β	Step Δ R^2
Exposure predicting Victimization				.04*
Witnessing	2.64	1.07	.21*	
Child Physical Abuse	-.93	1.19	-.07	
Exposure predicting Acceptance				.01
Witnessing	2.47	2.43	.08	
Child Physical Abuse	.07	2.71	.00	
Acceptance predicting Victimization				.02
Accept/phys	.07	.04	.15	
Exposure and Acceptance predicting Victimization				.06*
Witnessing	2.49	1.10	.20*	
Child Physical Abuse	-.94	1.22	-.07	
Accept/phys	.06	.04	.14	

Note. ***** $p < .05$. ****** $p < .01$. ******* $p < .001$. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. Accept/phys = AMDV-Phys and AFDV- Phys combined (AMDV = Attitudes Towards Male Dating Violence; AFDV = Attitudes Towards Female Dating Violence; Phys = physical violence).

Table 21

Regression Analyses to Assess Acceptance of Dating Violence as Mediator in the Relation Between Exposure to Violence (Witnessing Interparental Abuse and Child Physical Abuse) and Physical Dating Violence Victimization (N= 189)

Regression Analyses	*B*	*SE*(*B*)	β	Step Δ R^2
Exposure predicting Victimization				.04*
Witnessing	2.64	1.07	.21*	
Child Physical Abuse	-.93	1.19	-.07	
Exposure predicting Acceptance				.03
Witnessing	2.14	1.01	.17*	
Child Physical Abuse	-.47	1.13	-.03	
Acceptance predicting Victimization				.00
AMDV-Phys	.03	.08	.03	
Exposure and Acceptance predicting Victimization				.04
Witnessing	2.64	1.10	.21*	
Child Physical Abuse	-.93	1.22	-.07	
AMDV-Phys	.00	.08	.00	

Note. * *p* < .05. ** *p* < .01. *** *p* < .001. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. AMDV = Attitudes Towards Male Dating Violence; Phys = physical violence.

Table 22

Regression Analyses to Assess Acceptance of Dating Violence as Mediator in the Relation Between Exposure to Violence (Witnessing Interparental Abuse and Child Physical Abuse) and Physical Dating Violence Victimization (N= 189)

Regression Analyses	*B*	*SE(B)*	β	Step Δ R^2
Exposure predicting Victimization				.04*
Witnessing	2.64	1.07	.21*	
Child Physical Abuse	-.93	1.19	-.07	
Exposure predicting Acceptance				.00
Witnessing	.70	1.82	.03	
Child Physical Abuse	.83	2.03	.03	
Acceptance predicting Victimization				.04*
AFDV-Phys	.12	.05	.20*	
Exposure and Acceptance predicting Victimization				.08**
Witnessing	2.56	1.06	.20*	
Child Physical Abuse	-1.03	1.18	-.07	
AFDV-Phys	.11	.04	.20*	

Note. ***** *p* < .05. ****** *p* < .01. ******* *p* < .001. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. AFDV = Attitudes Towards Female Dating Violence; Phys = physical violence.

Table 23

Regression Analyses to Assess Acceptance of Dating Violence as Mediator in the Relation Between Exposure to Violence (Witnessing Interparental Abuse and Child Sexual Abuse) and Sexual Dating Violence Victimization (N= 189)

Regression Analyses	*B*	*SE(B)*	β	Step ΔR^2
Exposure predicting Victimization				.11***
Witnessing	2.36	.79	.23**	
Child Sexual Abuse	2.24	.77	.22**	
Exposure predicting Acceptance				.01
Witnessing	.48	1.97	.02	
Child Sexual Abuse	2.04	1.91	.08	
Acceptance predicting Victimization				.01
Accept/sex	.05	.03	.11	
Exposure and Acceptance predicting Victimization				.11***
Witnessing	2.34	.82	.22**	
Child Sexual Abuse	2.17	.80	.21**	
Accept/sex	.04	.03	.09	

Note. * *p* < .05. ** *p* < .01. *** *p* < .001. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. Accept/sex = AMDV-Sex and AFDV-Sex combined (AMDV = Attitudes Towards Male Dating Violence; AFDV = Attitudes Towards Female Dating Violence; Sex = sexual violence).

Table 24

Regression Analyses to Assess Acceptance of Dating Violence as Mediator in the Relation Between Exposure to Violence (Witnessing Interparental Abuse and Child Sexual Abuse) and Sexual Dating Violence Victimization (N= 189)

Regression Analyses	*B*	*SE(B)*	β	Step Δ R^2
Exposure predicting Victimization				.11***
Witnessing	2.36	.79	.23**	
Child Sexual Abuse	2.24	.77	.22**	
Exposure predicting Acceptance				.01
Witnessing	.25	1.24	.02	
Child Sexual Abuse	1.59	1.20	.10	
Acceptance predicting Victimization				.01
AFDV-Sex	.05	.05	.08	
Exposure and Acceptance predicting Victimization				.11**
Witnessing	2.35	.81	.22**	
Child Sexual Abuse	2.19	.79	.22**	
AFDV-Sex	.03	.05	.05	

Note. ***** *p* < .05. ****** *p* < .01. ******* *p* < .001. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. AFDV = Attitudes Towards Female Dating Violence; Sex = sexual violence.

Table 25

Regression Analyses to Assess Acceptance of Dating Violence as Mediator in the Relation Between Exposure to Violence (Witnessing Interparental Abuse and Child Sexual Abuse) and Sexual Dating Violence Victimization (N= 189)

Regression Analyses	*B*	*SE(B)*	β	Step Δ R^2
Exposure predicting Victimization				.11***
Witnessing	2.36	.79	.23**	
Child Sexual Abuse	2.24	.77	.22**	
Exposure predicting Acceptance				.00
Witnessing	.62	.92	.05	
Child Sexual Abuse	.40	.89	.03	
Acceptance predicting Victimization				.03*
AMDV-Sex	.14	.07	.17*	
Exposure and Acceptance predicting Victimization				.13***
Witnessing	2.28	.80	.22**	
Child Sexual Abuse	2.19	.77	.22**	
AMDV-Sex	.13	.06	.15*	

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. AMDV = Attitudes Towards Male Dating Violence; Sex = sexual violence.

Table 26

Regression Analyses to Assess Acceptance of Dating Violence as Mediator in the Relation Between Exposure to Violence (Witnessing Interparental Abuse and Child Psychological Abuse) and Psychological Dating Violence Victimization (N= 189)

Regression Analyses	*B*	*SE(B)*	β	Step ΔR^2
Exposure predicting Victimization				.09**
Witnessing	.11	1.87	.01	
Child Psychological Abuse	5.55	1.53	.30***	
Exposure predicting Acceptance				.02
Witnessing	4.96	2.66	.15	
Child Psychological Abuse	.01	2.16	.00	
Acceptance predicting Victimization				.06**
Accept/psyc	.17	.06	.25**	
Exposure and Acceptance predicting Victimization				.14***
Witnessing	-.70	1.90	-.03	
Child Psychological Abuse	5.54	1.52	.30***	
Accept/psyc	.16	.05	.24**	

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. Accept/psyc = AMDV-Psyc and AFDV- Psyc combined (AMDV = Attitudes Towards Male Dating Violence; AFDV = Attitudes Towards Female Dating Violence; Psyc = psychological violence).

Table 27

Regression Analyses to Assess Acceptance of Dating Violence as Mediator in the Relation Between Exposure to Violence (Witnessing Interparental Abuse and Child Psychological Abuse) and Psychological Dating Violence Victimization (N= 189)

Regression Analyses	*B*	*SE(B)*	β	Step ΔR^2
Exposure predicting Victimization				.09**
Witnessing	.11	1.87	.01	
Child Psychological Abuse	5.55	1.53	.30***	
Exposure predicting Acceptance				.01
Witnessing	2.20	1.52	.11	
Child Psychological Abuse	-.98	1.23	-.06	
Acceptance predicting Victimization				.06**
AMDV-Psyc	.28	.10	.23**	
Exposure and Acceptance predicting Victimization				.15***
Witnessing	-.53	1.85	-.02	
Child Psychological Abuse	5.83	1.49	.31***	
AMDV-Psyc	.29	.09	.25**	

Note. * *p* < .05. ** *p* < .01. *** *p* < .001. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. AMDV = Attitudes Towards Male Dating Violence; Psyc = psychological violence.

Table 28

Regression Analyses to Assess Acceptance of Dating Violence as Mediator in the Relation Between Exposure to Violence (Witnessing Interparental Abuse and Child Psychological Abuse) and Psychological Dating Violence Victimization (N= 189)

Regression Analyses	*B*	*SE(B)*	β	Step Δ R^2
Exposure predicting Victimization				.09**
Witnessing	.11	1.87	.01	
Child Psychological Abuse	5.55	1.53	.30***	
Exposure predicting Acceptance				.03
Witnessing	2.62	1.50	.14	
Child Psychological Abuse	.92	1.22	.06	
Acceptance predicting Victimization				.04*
AFDV-Psyc	.24	.10	.21*	
Exposure and Acceptance predicting Victimization				.12***
Witnessing	-.46	1.90	-.02	
Child Psychological Abuse	5.35	1.53	.29**	
AFDV-Psyc	.22	.10	.18*	

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. *B* = unstandardized regression coefficients; *SE* = standard errors; β = standardized regression coefficients; R^2 = squared correlation coefficient. AFDV = Attitudes Towards Female Dating Violence; Psyc = psychological violence.

Appendix B

INFORMED CONSENT

Title: College Students' Attitudes about Dating Violence

<table>
<tr><td>*Researchers*:</td><td>*Administrator:*</td></tr>
<tr><td>Marie Karlsson, B.S., Graduate Student</td><td>Iroshi Windwalker</td></tr>
<tr><td>Patricia Petretic, Ph.D., Faculty Advisor</td><td>Research and Sponsored Programs</td></tr>
<tr><td>University of Arkansas</td><td>Research Compliance</td></tr>
<tr><td>College of Arts and Sciences</td><td>University of Arkansas</td></tr>
<tr><td>Department of Psychology</td><td>120 Ozark Hall</td></tr>
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</table>

Description: This study will investigate prevalence and attitudes about dating violence among college students. You will be asked questions about current and past dating relationships, childhood experiences with violence, and current functioning in various domains. This information will be obtained by having you complete a questionnaire online through Experimetrix.

Risks and Benefits: A potential risk with participating in this study would be experiencing distress from answering questions about dating violence or childhood experiences with violence. The benefit of participating in this study would be to contribute to the knowledge base about dating violence among college students. The goal of this study is to gain knowledge about how attitudes of dating violence affect college students' experiences with violence in their intimate relationships. Participants will receive two (2) research credits for participating in this study.

Voluntary Participation: Your participation in this study is completely voluntary and you are not required or obligated to complete the questionnaire. This study should take about two (2) hours to complete.

Confidentiality: Your signed consent form will be kept separate from the completed questionnaire. Only a code number will be written on the questionnaire and it will not be associated with your name in any way. All information will be recorded anonymously and will be held confidential to the extent allowed by law and University policy.

Right to Discontinue Participation: You have the right to refuse to participate in this study or to discontinue your participation at any point without any consequences.

Informed Consent: I have read the description, including the nature and purposes of this study, the procedures to be used, the potential risks and benefits, as well as the option to discontinue participation at any time. Clicking on the button below indicates that I freely agree to participate in this research study.

Please read below and click on the button if you agree to continue your participation in this study.

☒ Yes, I have read the description, including the purpose of the study, the procedures to be used, the potential risks, the confidentiality, as well as the option to discontinue my participation in the study at any time. I believe I understand what is involved in this study. By clicking this button, I freely agree to participate in this experimental study.

Appendix C

Demographics and Relationship Status

1.   Age _____

2.   Sex: _____ Male   _____ Female

3.   Class Rank: _____ Freshman _____Sophomore _____Junior _____Senior

4.   Ethnicity: _____ Caucasian

             _____ African American

             _____ Native American

             _____ Hispanic

             _____ Asian American

             _____ Other: please specify _____

5.   Sexuality:

             _____ Heterosexual

             _____ Homosexual

             _____ Bisexual

             _____ Other (please specify): _____

6. Are you currently dating or in a dating/romantic/intimate relationship?

       _____Yes   _____ No

       If YES, this person is a (CHECK ONE):

             _____ Casual Dating Partner

             _____ Steady Dating Partner

_____ Live-In Partner

_____ Fiancé

_____ N/A

If YES, this person is (CHECK ONE):

_____ Same age as me

_____ Older than me and a college student

_____ Older than me and NOT a college student

_____ Younger than me and a college student

_____ Younger than me and NOT a college student

_____ N/A

If YES, how old is this person? _____

7. Approximately how many dating partners have you had?

_____ None

_____ 1-5

_____ 6-10

_____ 11-25

_____ 26-50

_____ More than 50 (please estimate): _____

8. Of all the dating partners you have had, how many of these relationships would you consider to have been serious? _____

9. What is the longest period of time you have ever been in a dating/romantic/intimate relationship?

_____ Never been in a dating/romantic/intimate relationship

_____ Less than a week

_____ Less than a month

_____ 1-6 months

_____ 6 months to a year

_____ 1-2 years

_____ More than 2 years

10. Describe when your longest dating/romantic/intimate relationship took place:

_____ Never been in a dating/romantic/intimate relationship

_____ Current relationship

_____ Within past 6 months

_____ Between 6 months and 1 year ago

_____ Over a year ago

11. How many years were you when you started dating or when you first became involved in a dating/romantic/intimate relationship? _____

Appendix D

Witnessing Interparental Abuse

The following questions are related to your childhood experiences before the age of 17:

1. Before the age of 17, did you ever witness your father using physical violence against your mother such as pushing, shoving, grabbing, slapping, or throwing something at her that could hurt?

_____Yes   _____ No

2. Before the age of 17, did you ever witness your father using physical violence against your mother such as choking, beating up, burning, scolding, kicking, or using a knife or gun on her?

_____Yes   _____ No

3. Before the age of 17, did you ever witness your mother using physical violence against your father such as pushing, shoving, grabbing, slapping, or throwing something at him that could hurt?

_____Yes   _____ No

4. Before the age of 17, did you ever witness your mother using physical violence against your father such as choking, beating up, burning, scolding, kicking, or using a knife or gun on him?

_____Yes   _____ No

Appendix E

CMIS-SF Selected Items (Briere, 1992)

1). When you were 16 or younger, how often did the following happen to you in the average year? Answer for your parents or stepparents or fosterparents or other adult in charge of you as a child:

never	once a year	twice a year	3-5 times a year	6-10 times a year	11-20 times a year	over 20 times a year
0	1	2	3	4	5	6

	never	once a year	twice a year	3-5 times a year	6-10 times a year	11-20 times a year	over 20 times a year
A) Yell at you	0	1	2	3	4	5	6
B) Insult you	0	1	2	3	4	5	6
C) Criticize you	0	1	2	3	4	5	6
D) Try to make	0	1	2	3	4	5	6
E) Ridicule or humiliate you	0	1	2	3	4	5	6
F) Embarrass you in front of others	0	1	2	3	4	5	6
G) Make you feel like you were a bad person	0	1	2	3	4	5	6

2). Before age 17, did a parent, step-parent, foster-parent, or other adult in charge of you as a child ever do something to you on purpose (for example, hit or punch or cut you, or push you down) that made you bleed or gave you bruises or scratches, or that broke bones or teeth?

Yes__ No__

3). Before you were age 17, did anyone ever kiss you in a sexual way, or touch your body in a sexual way, or make you touch their sexual parts?

Yes__ No__

Did this ever happen with a family member?

Yes__ No__

Did this ever happen with someone 5 or more years older than you were?

Yes__ No__

4). Before you were age 17, did anyone ever have oral, anal, or vaginal intercourse with you, or insert a finger or object in your anus or vagina?

Yes__ No__

Did this ever happen with a family member?

Yes__ No__

Did this ever happen with someone 5 or more years older than you were?

Yes__ No__

5). To the best of your knowledge, before age 17, were you ever sexually abused?

Yes__ No__

6). To the best of your knowledge, before age 17, were you ever physically abused?

Yes__ No__

Appendix F

Attitudes towards Dating Violence Scales (Price & Byers, 1999)

Please indicate your level of agreement with the items below.
1 = strongly disagree   2   3   4   5 = strongly agree

AMDV-Psyc

1. A guy should not insult his girlfriend.	1	2	3	4	5
2. A guy should not tell his girlfriend what to do.	1	2	3	4	5
3. A girl should ask her boyfriend first before going out with her friends.	1	2	3	4	5
4. Relationships always work best when girls please their boyfriends.	1	2	3	4	5
5. There is never a reason for a guy to threaten his girlfriend.	1	2	3	4	5
6. Sometimes guys just can't help but swear at their girlfriends.	1	2	3	4	5
7. A girl should always change her ways to please her boyfriend.	1	2	3	4	5
8. A girl should always do what her boyfriend tells her to do.	1	2	3	4	5
9. A guy does not need to know his girlfriend's every move.	1	2	3	4	5
10. There is never a good enough reason for a guy to swear at his girlfriend.	1	2	3	4	5
11. It is understandable when a guy gets to angry that he yells at his girlfriend.	1	2	3	4	5
12. It is O.K. for a guy to bad mouth his girlfriend.	1	2	3	4	5
13. There is never a reason for a guy to yell and scream at his girlfriend.	1	2	3	4	5
14. A girl should not see her friends if it bothers her boyfriend.	1	2	3	4	5

15. It is important for a girl to always dress the way her boyfriend wants.   1   2   3   4   5

AMDV-Phys

16. A girl should break up with a guy when he hits her.   1   2   3   4   5

17. Some girls deserve to be slapped by their boyfriends.   1   2   3   4   5

18. It is never O.K. for a guy to hit his girlfriend.   1   2   3   4   5

19. Sometimes guys just cannot stop themselves from punching girlfriends.   1   2   3   4   5

20. There is no good reason for a guy to push his girlfriend.   1   2   3   4   5

21. Sometimes a guy cannot help hitting his girlfriend when she makes him angry.   1   2   3   4   5

22. There is no good reason for a guy to slap his girlfriend.   1   2   3   4   5

23. Sometimes jealousy makes a guy so crazy that he must slap his girlfriend.   1   2   3   4   5

24. Girls who cheat on their boyfriends should be slapped.   1   2   3   4   5

25. Sometimes love makes a guy so crazy that he hits his girlfriend.   1   2   3   4   5

26. A guy usually does not slap his girlfriend unless she deserves it.   1   2   3   4   5

27. It is O.K. for a guy to slap his girlfriend if she deserves it.   1   2   3   4   5

AMDV-Sex

28. When a guy pays on a date, it is O.K. for him to pressure his girlfriend for sex.   1   2   3   4   5

29. Guys do not own their girlfriends' bodies.   1   2   3   4   5

30. When guys get really sexually excited,   1   2   3   4   5
     they cannot stop themselves from having sex.

31. Guys should never get their girlfriends drunk   1   2   3   4   5
     to get them to have sex.

32. A guy should not touch his girlfriend unless   1   2   3   4   5
     she wants to be touched.

33. It is alrights for a guy to force his girlfriend   1   2   3   4   5
     to kiss him.

34. Often guys have to be rough with their   1   2   3   4   5
     girlfriends to turn them on.

35. To prove her love, it is important for a girl   1   2   3   4   5
     to have sex with her boyfriend.

36. A girl who goes into a guy's bedroom is   1   2   3   4   5
     agreeing to sex.

37. It is no big deal to pressure a girl into   1   2   3   4   5
     having sex.

38. It is alright to pressure a girl to have sex   1   2   3   4   5
     if she has had sex in the past.

39. After a couple is going steady, the guy   1   2   3   4   5
     should not force his girlfriend to have sex.

AFDV-Psyc

40. There is no excuse for a girl to threaten   1   2   3   4   5
     her boyfriend.

41. There is never a good enough reason for   1   2   3   4   5
     a girl to swear at her boyfriend.

42. Girls have the right to tell their boyfriends   1   2   3   4   5
     how to dress.

43. A guy should always do what his girlfriend   1   2   3   4   5
     tells him to do.

44. If a girl yells and screams at her boyfriend   1   2   3   4   5
     it does not really hurt him seriously.

45. Girls have a right to tell their boyfriends   1   2   3   4   5

what to do.

46. It is important for a guy to always dress the way his girlfriend wants.   1   2   3   4   5

47. Sometimes girls just can't help but swear at their boyfriends.   1   2   3   4   5

48. A guy should always ask his girlfriend first before going out with his friends.   1   2   3   4   5

49. It is O.K. for a girl to bad mouth her boyfriend.   1   2   3   4   5

50. It is understandable when a girl gets to angry that she yells at her boyfriend.   1   2   3   4   5

51. Sometimes girls have to threaten their boyfriends so that they will listen.   1   2   3   4   5

52. A girl should not control what her boyfriend wears.   1   2   3   4   5

AFDV-Phys

53. It is O.K. for a girl to slap her boyfriend if he deserves it.   1   2   3   4   5

54. It is no big deal if a girl shoves her boyfriend.   1   2   3   4   5

55. Sometimes girls just cannot stop themselves from punching their boyfriends.   1   2   3   4   5

56. Some guys deserve to be slapped by their girlfriends.   1   2   3   4   5

57. Sometimes a girl must hit her boyfriend so that he will respect her.   1   2   3   4   5

58. A girl usually does not slap her boyfriend unless he deserves it.   1   2   3   4   5

59. A girl should not hit her boyfriend regardless of what he has done.   1   2   3   4   5

60. There is never a reason for a guy to get slapped by his girlfriend.   1   2   3   4   5

61. Pulling hair is a good way for a girl to get back at her boyfriend.   1   2   3   4   5

62. It is never O.K. for a girl to slap her boyfriend.   1   2   3   4   5

63. Some girls have to pound their boyfriends to make them listen.   1   2   3   4   5

64. A guy should break up with a girl when she slaps him.   1   2   3   4   5

AFDV-Sex

65. A girl should not touch her boyfriend unless he wants to be touched.   1   2   3   4   5

66. There is nothing wrong with a guy changing his mind about having sex.   1   2   3   4   5

67. A guy should break up with his girlfriend if she has forced him to have sex.   1   2   3   4   5

68. A girl should only touch her boyfriend where he wants to be touched.   1   2   3   4   5

69. A guy who goes into a girl's bedroom is agreeing to sex.   1   2   3   4   5

70. It is alright for a girl to force her boyfriend to kiss her.   1   2   3   4   5

71. Girls should never get their boyfriends drunk to get them to have sex.   1   2   3   4   5

72. If a guy says 'yes' to sex while drinking, he is still allowed to change his mind.   1   2   3   4   5

73. After a couple is going steady, the girl should not force her boyfriend to have sex.   1   2   3   4   5

74. Girls should never lie to their boyfriends to get them to have sex.   1   2   3   4   5

75. To prove his love, it is important for a guy to have sex with his girlfriend.   1   2   3   4   5

76. It is O.K. for a girl to say she loves a guy to get him to have sex.   1   2   3   4   5

Appendix G

DEBRIEFING FORM

Title: College Students' Attitudes about Dating Violence

Researchers: *Administrator:*
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Thanks for participating in this study investigating college students' attitudes about dating violence.

This research study investigates how college students' previous experiences with violence are related to their attitudes of dating violence. This study is especially interested in understanding how acceptance of violence relates to dating violence victimization.

The results of this research will help us to better understand the impact dating violence can have on college students. In rare cases, participants may experience adverse effects following completion of this study. Some of these effects may include symptoms of depression or anxiety. We urge you to contact any of the resources listed below if you experience any of these changes. You may also contact Dr. Petretic at (479) 575-4258 if you have any questions.

1. Counseling & Psychological Services   575-5276
2. Psychological Clinic   575-4258
3. Crisis Center Hotline   1-888-274-7472
4. Ozark Guidance   750-2020
5. Ozark Guidance (24 hr line)   1-800-234-7052

PLEASE DO NOT DISCUSS YOUR PARTICIPATION WITH OTHER PEOPLE WHO MIGHT PARTICIPATE IN THIS STUDY!