# COULD TEACHER SUPPORT HELP BREAK THE CYCLE OF VIOLENCE?

A Dissertation

by

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Submitted to the Office of Graduate and Professional Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

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August 2015

Major Subject: School Psychology

ABSTRACT

Child maltreatment has been occurring at distressing rates and is associated with grave consequences, including involvement in future violence. Victims of child maltreatment are at an increased risk for being the perpetrator and/or victim of youth violence and intimate partner violence. Due to the prevalence of child maltreatment and its association with future violence, it is important to identify ways to intervene with victims of child abuse and prevent the cycle of violence from continuing. The current study explores whether a supportive relationship with a teacher could prevent victims of child abuse from becoming involved in subsequent violence. Path analysis was used to explore the relationships between childhood maltreatment, youth violence, intimate partner violence, and student-teacher relationships. Youth violence perpetration was associated with IPV perpetration for females, but not males. Youth violence victimization mediated the relationship between child physical abuse and IPV perpetration and victimization. The association between youth violence perpetration and youth violence victimization was stronger for male victims of child physical abuse who reported low levels of teacher support. Results emphasize the importance of interventions aimed at individuals with histories of child physical maltreatment to help prevent subsequent violence. While interventions may be similarly effective for males and females, specific interventions should be tailored toward females who perpetrate violence as adolescents and males who report low levels of teacher support.

# DEDICATION

I dedicate this dissertation to my husband and parents for their unwavering love and support.

ACKNOWLEDGEMENTS

I am very appreciative of many individuals who have supported my work and encouraged me throughout the writing of this dissertation. I have been truly blessed. Without each of them, I would not have been able to complete this undertaking.

Foremost, I would like to sincerely thank my advisor, Dr. Jamilia Blake, and my committee members, Dr. Jan Hughes, Dr. Victor Willson, and Dr. Verna Keith. I am thankful for the expertise, guidance, and patience they generously gave to improve my work. Their passion for teaching and their patience with me as a beginning researcher made this project possible.

I would also like to thank my other instructors, my mentors, and Dr. Myung Hee Im. The training I received from them and the experiences I obtained have provided me with an exceptional foundation as I begin my career as a School Psychologist and continue my work as a researcher.

My heartfelt thanks go to my husband, Nicholas. His steadfast love for Morgan, Calvin, and me; his constant faith in me; and his personal sacrifices enabled me to pursue my goals. He made attending graduate school possible, and made enduring graduate school a fun adventure. I love the life we share together.

Finally, I would like to thank my parents, Timothy and Robin Vaughan. From a young age, they instilled in me the love of learning, importance of hard work, and value of caring for others, which motivated me to pursue higher education and enter the field of psychology. Their immeasurable love and ongoing emotional and financial support

made it possible for me to follow my dreams. I would not have been able to complete

this long journey without them.

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CHAPTER I

INTRODUCTION

Victims of child maltreatment often face grave consequences throughout their life. For example, experiencing maltreatment during childhood increases the likelihood of experiencing problems in future relationships (Fang & Corso, 2007). Children who are the victims of maltreatment are at an increased risk for being the perpetrators or victims of violence during adolescence, as well as the perpetrators or victims of intimate partner violence (IPV) during adulthood (Heyman & Sleps, 2002). Researchers have found that the relationship between child maltreatment and IPV seems to be mediated by the involvement in youth violence perpetration or victimization (Fang & Corso, 2007).

Social learning theory has been used to explain why there are associations among childhood, peer, and intimate partner relationships. According to social learning theory, children learn abusive behaviors through modeling (Bandura, 1973). Attachment theory has also been used to explain the associations among violence in childhood, peer, and intimate partner relationships. Attachments theorists explain that children construct views about themselves and others based on their relationships with significant adults in their life. These mental representations influence their future relationships (Bowlby, 1969).

One of the main goals of the current study is to identify ways to intervene in the cycle of violence and prevent subsequent violence. It is hypothesized that supportive relationships with teachers could be one factor to help prevent victims of child

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maltreatment from being the perpetrators or victims of subsequent violence. There is a vast amount of researcher that has examined the impact of teacher-student relationships on children's behavior. However, only a small portion of this literature has focused on exploring the impact that teacher-student relationships have on the associations between child abuse, youth violence, and IPV. Determining how child maltreatment is related to involvement in youth violence and IPV, and exploring the impact teacher support may have on the cycle of violence will advance the literature and possibly identify areas for prevention and intervention.

CHAPTER II

LITERATURE REVIEW

**Prevalence of Maltreatment**

Child maltreatment, also referred to as abuse and neglect, is occurring at distressing rates, with 4 to 21% of adults reporting experiencing physical abuse, sexual abuse, or neglect as a child (Fang & Corso, 2007). Research suggests that children who have experienced maltreatment are at increased risk for being involved in youth violence and intimate partner violence (IPV); yet mechanisms that explain how this vicious cycle of violence can be disrupted have not been fully explored (Fang & Corso, 2007). It is possible that the type of relationships youth with a history of maltreatment form with supportive caregivers outside of the home, such as their teachers, might play a role in reducing abused children's risk for involvement in interpersonal violence as an adolescent. The purpose of this study is to examine if supportive relationships with teachers could reduce the likelihood that victims of child maltreatment will be involved in subsequent victimization as adolescents and adults.

**Definition of Maltreatment**

Although researchers have been examining child maltreatment for over three decades, there is confusion about how best to define it (National Research Council, 1993). The National Incidence Studies (National Center on Abuse & Neglect, 1988) and the Maltreatment Classification System (Barnett, Manly, & Cicchetti, 1993) have attempted to develop a description of child maltreatment, but there is still no single

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definition adopted by researchers and practitioners. Specifically, there appears to be limited consensus as to whether child maltreatment should be defined based on adult characteristics, adult behaviors, child outcomes, or the environmental context in which the maltreatment occurs (National Research Council, 1993). Further, it is difficult to differentiate between maltreatment and poor parenting, and people are unsure whether the actions of the perpetrator or the experience of the victim should guide the definition (Barnett et al., 1993). Lack of a reliable definition for child maltreatment can be problematic for researchers (Ibanez, Borrego, Pemberton, Terao, 2006) and can result in different prevalence rates being reported throughout the literature (Wyatt & Peters, 1986). The Child Abuse Prevention and Treatment Act provides one definition of child maltreatment that will be used in the current study. This legislation defines child maltreatment as "at a minimum, any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation or an act or failure to act which presents an imminent risk of serious harm" (US Department of Health and Human Services, 2003).

The effects of child maltreatment depend on the specific type of abuse experienced by the victims. Thus, researchers argue that it is important to examine the various subtypes of maltreatment separately, rather than examining abuse in general (Petrenko, Friend, Garrido, Taussig, & Culhane, 2012). While there is some incongruity across the field regarding which subtypes of abuse exist, there are subtypes of maltreatment that are commonly used by researchers and professionals: physical abuse,

sexual abuse, physical neglect, emotional maltreatment, and moral/legal/educational

maltreatment (English, Thompson, Graham, & Briggs 2005).

Similar to the lack of agreement about the definition of child maltreatment, there

is not a single definition of each subtype of abuse. The definition of physical abuse

varies depending on the severity of the behavior. Some people use a broader definition

of child physical abuse, which includes throwing an object at a child, grabbing, shoving,

or slapping; whereas others describe child physical abuse as involving more harsher

forms of violence such kicking, biting, punching, hitting a child with an object, beating

up a child, or threatening a child with a weapon (Giles-Sims, 1983; O'Keefe, 1995). The

definition of physical abuse also varies by state. For example, California, Minnesota, and

Ontario each have a different definition for child physical abuse (California Welfare &

Institutes Code, 2009; Minnesota Statues Annotated, 1998; Child and Family Services

Act). In the current study, physical abuse will include slapping, hitting, kicking, and

throwing down a child.

When defining child sexual abuse, many people consider the factors involved in

the situation to determine if a sexually motivated act toward a child constitutes sexual

abuse. Aspects of the situation that are considered include whether the abuse involved

contact or no contact, whether the perpetrator was a peer or older, and the age of the

victim (Wyatt & Peters, 1986). In this study, sexual abuse will be defined as a parent or

caregiver touching a child in a sexual way or having sexual relations with the child.

Scholars propose that the definition of neglect is the most difficult subtype of

maltreatment to define because of cultural expectations of appropriate parenting (Elliott

& Urquiza, 2006) and because of the high correlation between poverty and neglect (Drake & Pandey, 1996). A general definition states that neglect is when caregivers omit behavior that a child needs (Mennen, Kim, Sang, & Trickett, 2010). Similar to the definition of physical abuse, the definition of neglect varies by state (Legislative Analysts Office, 1996; New York Social Services Law, 2006; US Department of Health and Human Services, 2009). For the purpose of this study, neglect is defined as a lack of supervision of a child and the failure to care for the basic needs of a child.

**Definition of Youth Violence**

In addition to difficulties with defining maltreatment, researchers in the child abuse literature have also failed to reach a consensus on what constitutes youth violence. Violence is generally defined as behavior that is intended to injure another person or behavior that another person perceives as harmful and can include bullying marked by physical victimization, emotional violence, or psychological bullying (Crick & Bigbee, 1998; Crick, Casas, & Nelson, 2002; Hawker & Boulton, 2000; Elinoff, Chafouleas, & Sassu, 2004; Straus, Gelles, & Steinmetz, 1981). Some researchers include delinquency and the destruction of property as acts of violence, but those behaviors are outside the scope of this study. This study defines youth violence as physical violence and threats of physical violence, such as injuring, using a weapon, threatening to injure or use a weapon, and carrying a weapon. Youth violence is a form of interpersonal violence. Interpersonal violence is a general term describing violent acts (physical assault, stalking, sexual assault, psychological violence, neglect) directed at a person or group (child, older person, stranger) with negative consequences (injury, death). Interpersonal

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violence differs from IPV, which is violence that occurs within an intimate relationship (Hartley, 2004).

**Definition of IPV**

IPV has been defined as an action that is intended to injure another person or an act that is perceived as harmful (Straus et al., 1981). However, some have pointed out that injury promotive behavior can be considered IPV, even if the perpetrator did not have the intent of abusing the victim or even if the victim did not realize IPV had occurred (Marshall, 1994). Some define IPV as the abuse of power by an intimate partner or ex-partner, which negatively impacts the victim's emotional and psychological functioning (DeKeseredy & MacLeod, 1997). Another definition states that IPV involves any physical, psychological, or sexual threat or harm that occurs in an intimate relationship (Heise & Garcia-Moreno, 2002; Chang et al., 2005). Loring (1994) defined IPV as an ongoing process that diminishes the inner self of another person.

Maltreatment in intimate relationships occurs in many forms. IPV can be in the form of physical assault, psychological aggression, sexual coercion, negotiation tactics (Straus et al., 1996), verbal abuse, humiliation, isolation, economic deprivation (Walker, 2000), threats, controlling, destroying property, intimidating, and stalking (Edleson, 2006; Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002). Some forms of IPV are separated further. For example, psychological abuse can involve threats, control over one's freedoms, intimidation, isolation, and dominance (Follingstad & DeHart, 2000). IPV is defined as causing physical harm, threatening to physically injure a partner, or forcing a partner to have sexual relations.

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**Effects of Maltreatment on Future Relationships**

Despite the confusion in defining child maltreatment, youth violence, and IPV, researchers have done their best to examine the relationships among these variables. Child maltreatment has consistently been linked to many negative consequences, including mental, behavioral, and social problems (Cash, 2001). In particular, child abuse has been associated with negative effects on children's future relationships. Children who experience maltreatment are at an increased risk for being the perpetrators or victims of violence as youth, as well as the perpetrators or victims of intimate partner violence (IPV) through adulthood (Heyman & Sleps, 2002).

Children who are subject to maltreatment are at an increased risk for displaying violence as adolescents and adults, as reported in the following studies. When studies examined maltreatment in general, without exploring differences between specific types of abuse, numerous relationships were found. Child abuse was found to be a direct predictor of violent arrests (Lansford et al., 2007; Widom, Schuck, & White, 2006), and an indirect predictor of violent arrests through the presence of early aggression for males (Widom et al., 2006). Children with a history of maltreatment are more likely to bully students in preschool (Holt, Finkelhor, & Kantor, 2007), during early school years, and throughout adolescent years (Smith, 2006); are more likely to be aggressive (English, Thompson, Graham, Briggs, 2005; English, Graham, Litrownik, Everson, & Bangdiwala, 2005; Turner, Finkelhor, & Ormrod, 2006; Widom et al., 2006); display more delinquent behaviors (Manly, Cicchetti, & Barnett, 1994; Manly, Kim, Rogosch, & Cicchetti, 2001; Stewart, Livingston, & Dennison, 2008; Thornberry, Ireland, & Smith,

2001); are more likely to display externalizing problems (Manly et al., 2001); and have higher rates of criminal offending in adolescence (Stewart et al., 2008) and adulthood (Mersky & Reynolds, 2007). More specific findings were reported when the subtypes of maltreatment were studied. For example, child physical abuse is a significant direct predictor of youth violence perpetration among girls (Fang & Corso, 2007), reactive aggression for boys (Ford, Fraleigh, & Connor, 2010), and antisocial behavior and aggression among young children and adolescence (Hill, 2002; Shaw, Gillion, Ingoldsby, & Nagin, 2003; Jaffee, Caspi, Moffitt, & Taylor, 2004; Lansford et al., 2002; Maughan & Cicchetti, 2002; Vandenberg & Marsh, 2009; Swinford, DeMaris, Cernkovich, & Giordano, 2000). A significant positive relationship has been found between the amount of direct aggression children experience and the amount of aggression they report committing as adolescents, even when other predictors are controlled (Maxwell & Maxwell, 2003). Sexually abused children have been rated as more aggressive than control groups (Vandenberg & Marsh, 2009), and display more violent behaviors (Merrill et al., 1999). Neglect was found to be a direct predictor of violent arrests (Lansford et al., 2007; Widom et al., 2006) and an indirect predictor of violent arrests through the presence of early aggression for males (Widom et al., 2006).

**Association between Child Maltreatment and Youth Violence Victimization**

Individuals who have experienced childhood maltreatment are also at an increased risk of being the victims of violence. When considering any form of maltreatment, researchers have found that children who experience maltreatment are more likely to be bullied by students in preschool (Holt et al., 2007), during early school

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years (Smith, 2006), and throughout adolescence (Smith, 2006). Overall, people who experience one incidence of victimization are at a greater risk for experiencing subsequent victimization (Weisel, 2005). Child physical abuse places children at risk for being the victims of violent assault during adolescence (Fergusson & Lynskey, 1997) and places girls at risk for teen dating victimization (Malik, Sorenson, & Aneshensel, 1997; O'Keefe, 1998; Sappington, Pharr, Tunstall, & Rickert, 1997). Child neglect is a significant direct predictor of youth violence victimization for males (Fang & Corso, 2007). Childhood sexual abuse is a risk factor for sexual victimization (Black, Heyman, & Slep, 2001; Coid et al., 2001; Maker, Kemmelmeier, & Peterson, 2001; Noll, Horowitz, Bonanno, Trickett, & Putnam, 2003; Stermac, Reist, Addison, & Millar, 2002; Tyler, Hoyt, & Whitbeck, 2000) and physical victimization (Boney-McCoy & Finkelhor, 1995; Gidycz, Coble, Latham, & Layman, 1993; Krahe, Scheinberger-Olwig, Waizenhofer & Koplin, 1999; Noll et al., 2003).

**Association between Child Maltreatment and IPV Victimization**

The victimization youth experience in childhood and adolescence often continues into adulthood. Children who experience maltreatment are at an increased risk for IPV victimization. Studies examining maltreatment in general found varying results. In some cases, experiencing abuse from caregivers increases the likelihood of being the victim of IPV for men and women (Capell & Heiner, 1990; Ehrensaft et al., 2003; Gomez, 2011; Laporte, Jiang, Pepler, & Chamberland, 2011; Riggs, O'Leary, & Breslin, 1990; Wenzel, Tucker, Elliott, Marshall, & Williamson, 2004), while other studies have found this relationship to exist only for women (Vezina & Hebert, 2007; Wolfe, Scott, Wekerle, &

Pittman, 2001). Childhood physical abuse and sexual abuse are predictors of IPV

victimization (Schewe, Riger, Howard, Staggs, & Mason, 2006; Simons, Burt, &

Simons, 2008; Vezina & Hebert, 2007; Tjaden & Thoennes, 2000; Messman-Moore &

Long, 2000). Authors found that women who were the victims of IPV had higher rates of

childhood physical and sexual abuse (Weaver & Clum, 1996).

**Association between Child Maltreatment and IPV Perpetration**

Similar to the continuation of victimization across the lifespan, violence that is

observed in adolescence is often observed in intimate partner relationships. Physical

abuse is a predictor of IPV perpetration for males and females. When mothers physically

abuse their children, their daughters are at an increased risk of perpetrating IPV (Foshee,

Bauman, & Linder, 1999). When boys are the victims of physical abuse, they are more

likely to hold positive views of IPV, be more accepting of IPV (Delsol & Margolin,

2004; Foshee et al., 1999), and perpetrate IPV (Wekerle et al., 2001; Daigneault, Hebert,

& McDuff, 2009). Child sexual abuse increases the likelihood of IPV perpetration

among females (Daigneault et al., 2009), while child neglect is a predictor of IPV

perpetration for males (Bevan & Higgins, 2002; Wekerle et al., 2001).

**Youth Violence as a Mediator**

A relationship between youth violence and adult violence is observed in the

general population. Even among children who are not the victims of maltreatment, there

tends to be a relationship between the participation in violence as youth and the

involvement in violence as young adults. In general, aggressive behavior tends to be

stable when it appears early in life. Children who display higher rates of aggressive

behaviors in preschool also display higher levels of problem behavior in Kindergarten (Silver, Measelle, Armstrong, & Essex, 2005), and antisocial behavior tends to be stable in children from Kindergarten to first grade (Birch & Ladd, 1998). Aggression is not only stable throughout childhood. Individuals who display aggression as children are also more likely to display antisocial behavior as adolescents and adults (Broidy et al., 2003).

The relationship between child maltreatment and IPV seems to be mediated by the involvement in youth violence perpetration or victimization. When boys are neglected as children, there is an increased likelihood that they will be the victims or perpetrators of youth violence, which in turn predicts their risk for being the victims or perpetrators of IPV (Fang & Corso, 2007). A similar relationship is found for girls. When girls are neglected or physically abused, they are more likely to perpetrate youth violence, which indirectly increases their likelihood of perpetrating IPV (Fang & Corso, 2007). Being involved in teen IPV is associated with being involved in adult IPV (Halpern, Oslak, Young, Martin, Kupper, 2001; O'Leary & Slep, 2003). Females who display more externalizing behavior problems during early adolescence are more likely to perpetrate IPV in late adolescence (Schnurr & Lohman, 2008).

**Social Learning Theory**

Associations among childhood, peer, and intimate partner relationships are partly explained by social learning theory. Social learning theory is one of the most often cited explanations for the intergenerational transmission of violence (Feldman, 1997; Schwartz, Hage, Bush, & Burns, 2006). According to social learning theory, children

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learn abusive behaviors through modeling (Bandura, 1973). When children are exposed to violence, they observe live aggressive models, such as caregivers, and symbolic models, such as characters portrayed on television and in movies (Banyard, Arnold, & Smith, 2000; Feldman, 1997; Wekerle et al., 2009). Children imitate the aggressive behaviors they witness and violent behaviors are carried out in their peer interactions and repeated in romantic relationships (Capaldi & Clark, 1998; O'Leary, 1988; Gilliom, Shaw, Beck, Schonberg, & Lukon, 2002).

Experiencing maltreatment can teach children to display behaviors similar to those of the perpetrators. Observing and experiencing abuse teaches children that violence is an acceptable and effective way to manage interpersonal conflicts (Capaldi & Clark, 1998), maintain power and control (Feldman, 1997), communicate (Wekerle et al., 2009), and resolve conflict in an intimate relationship (Straus & Smith, 1990). Experiencing maltreatment may also teach children to exhibit behaviors similar to those of the victims. Children learn to accept aggression (Feldman, 1997), expect violence (Arias, 2004), condone abuse in intimate relationships (Margolin, Gordis, Medina, & Oliver, 2003), and fall into patterns of subordination (Andrews, Foster, Capaldi, & Hops, 2000; Feiring, Rosenthal, & Taska, 2000). In addition to teaching children aggressive or passive behaviors, experiencing childhood maltreatment deprives children of learning positive behaviors. Individuals who are the victims of abuse may have a limited range of adaptive behaviors (Shields & Cicchetti, 1998).

Some factors help determine whether or not children emulate the behaviors they observe. Characteristics of the child's relationship with the model impact whether or not

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the child will imitate the behaviors. For example, children are more likely to imitate violence and aggression if the model performing the behavior is the same sex (O'Keefe, 1998), if they consider the people modeling the behavior to be influential or in authority (Bandura, 1977), if they strongly identify with the perpetrator (Feldman, 1997), or if they have frequent contact with people who model the behavior or accept the behavior (Gwartney-Gibbs, Stockard, & Bohmer, 1987). Outcomes of the behavior also influence whether or not the child will repeat the behaviors. Children are more likely to imitate the behavior if they think the behavior results in a desired outcome (Feldman, 1997; Kerley, Xu, Sirisunyaluck, & Alley, 2010; Wareham, Boots, & Chavez, 2009).These factors are often in place within families, which increases the likelihood that children will behave violently if aggression is modeled for them.

**Attachment Theory**

Attachment theory has also been used to explain the associations among violence in childhood, peer, and intimate partner relationships. According to attachment theory, children construct views about themselves and others based on their relationships with significant adults in their life. They develop mental representations that are reflective of their early experiences with their primary caregivers. These mental representations influence how children behave in future relationships, how they feel in various interpersonal situations, how they interpret events involving other people, and what type of attachment style they develop (Bowlby, 1969).

Attachment styles are impacted when children are distressed and their caregivers either neglect them or respond to them with abuse. Children are confused because they

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experience harm from the people who are supposed to comfort them. They develop

mental representations based on this conflicted message (Main, 1996). Developing

mental representations based on conflictual messages worsen children's negative

emotional states, increase the likelihood that children will develop poor affect regulation,

and make it more likely that children will have an increased likelihood of developing

psychopathology and violence (Bowlby, 1969; Bowlby, 1988; Bradley, 2000). Children

with a history of maltreatment are more likely to develop insecure attachment styles

(Barnett, Ganiban, & Cicchetti, 1999; Cicchetti, Rogosch, & Toth, 2006; Cicchetti, Toth,

& Lynch, 1995).

**Roles of Gender and Type of Abuse**

Most of the research examining the relationships between child maltreatment,

youth violence, and IPV has varying results depending on gender. Some researchers

have used theories and made hypotheses to explain why gender impacts the cycle of

violence. In Brody's (1985) review of the emotional development literature, he noted

that boys often suppress the expression of many emotions because of societal pressure to

appear masculine. When boys are the victims of maltreatment, they often experience

sadness, fear, shame, powerlessness, and helplessness because victimization challenges

their masculinity. It becomes increasingly difficult for boys to suppress such emotions,

so they express anger, which they perceive as a more gender appropriate way to express

emotions (Bolton, Morris, & MacEachron, 1989; Lisak, 1995; Mosher & Tomkins,

1988). Suppressing many emotions and expressing anger could lead to more aggressive

behavior and less empathic actions (Miller & Eisenberg, 1988).

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According to transactional theory (Sameroff & Fiese, 2000), children's behavior is impacted by characteristics of the child, characteristics of the caregiver, and aspects of the environment. This theory proposes that one child characteristic that influences behavior is gender. For example, transactional theorists have cited studies which report that boys tend to have higher externalizing behavior problems than girls (Bongers et al., 2003; Prinzie, Onghena, & Hellinckx, 2006). The relationships between child maltreatment and involvement in subsequent violence could be different for boys compared to girls because boys tend to have higher externalizing behavior problems in general. This hypothesis raises some debate; however, because some studies found no gender differences in externalizing behavior when they used caregiver report (McCrae, 2009).

The effects of maltreatment may also vary based on the gender of the perpetrator. Limited research has examined the impact of perpetrator gender, but the research that has been conducted has found gender differences. Maltreatment by same-sex caregivers has more influence on future parenting behavior (Thornberry et al., 2003), and the intergenerational transmission of violence is stronger for males (Lackey, 2003; Stith et al., 2000). Theorists suggest that these effects are due to same-sex modeling effects (Mihalic & Elliott, 1997).

**Role of Teacher Support**

While there is extensive research confirming the relationships between child maltreatment, youth violence, and IPV, there may be factors that could help break this cycle of violence. Supportive relationships with teachers could help prevent victims of

child maltreatment from being the perpetrators or victims of subsequent violence. Teacher support is defined by the qualities that characterize the relationships between teachers and their students. The quality of teacher-student relationships vary, and can involve closeness, conflict, or dependency (Birch & Ladd, 1998; Pianta & Steinberg, 1992).

According to many attachment theorists, the mental representations children form about relationships are often stable and frequently impact all of their relationships, making the relationships they form with various adult caregivers similar in many ways (Birch & Ladd, 1998). Thus, the relationships children have with their caregivers are often similar to the relationships they have with their teachers (Pianta & Steinberg, 1992).

Attachment styles are fairly consistent; however, it has been proposed that attachment styles are able to change more than attachment theorists initially thought (Vondra, Shaw, Swearingen, Cohen, & Owens, 2001). This could particularly be the case for children who have a history of maltreatment. Since these children experience less stability from parents and less supportiveness from family members, their attachment styles are even less consistent (Vondra et al., 2001). If children's attachment styles are able to change, it is possible for the quality of teacher-student relationships to impact students' attachment styles.

Teacher-student relationships could serve as protective factors, helping students' behavior improve, or teacher-student relationships could serve as risk factors, making it more likely that students' behavior problems will continue or increase (Silver et al.,

2005). Conflict in teacher-student relationships could provide children with additional relational models that involve problems and antisocial behaviors. These relational models could strengthen children's beliefs about conflict in relationships and the effectiveness of aggression, as was discussed by Birch and Ladd (1998). Conversely, supportive relationships with teachers could allow students to develop more adaptive views about themselves and others, which could help them acquire more positive relational models (Birch & Ladd, 1998; Lynch & Cicchetti, 1992).

When considering the impact of teacher support from the view of social learning theory, teachers could serve as models of adaptive behavior for children. Students may be likely to imitate the positive behaviors of their teachers because of characteristics of the teachers. Students may identify with their teachers (Feldman, 1997), consider teachers to be influential authority figures (Bandura 1973), or be the same sex as their teachers (O'Keefe, 1998). Students may also be more likely to copy the behaviors of their teachers because of the context of the behaviors. Students observe the behavior resulting in desired outcomes around the classroom (Wareham et al., 2009), and have frequent contact with the teachers and other children who accept the teachers' behavior. All of these factors have been known to impact the likelihood of children imitating behavior they have observed.

To date, limited research has explored the impact that teacher-student relationships have on the associations between child abuse, youth violence, and IPV. No research has examined the relation between teacher support and youth violence as a mediator between child maltreatment and IPV. Researchers have examined the impact

teacher-student relationships have on children's behavior in general, however. The quality of teacher-student relationships has been predictive of students' behavior and discipline later in school (Hamre & Pianta, 2001). When teacher-student relationships include high levels of support and low levels of conflict, they are associated with benefits among the students. Some of these benefits include being better adjusted (Hamre & Pianta, 2006), displaying lower levels of aggression (Hughes, Cavell, & Jackson, 1999; Meehan, Hughes, & Cavell, 2003; Silver et al., 2005), exhibiting more prosocial behavior (Howes & Hamilton, 1993), and being better accepted by classmates (Hughes, Cavell, & Willson, 2001). Contrarily, when teacher-student relationships include high levels of conflict and lower levels of closeness, the relationships contribute to externalizing behavior, aggression, antisocial behavior, and conduct problems (Pianta & Steinberg, 1992; Pianta, 1994; Silver et al., 2005). Children's peer relationships are also influenced by their relationships with teachers. Conflictual teacher-student relationships are associated with less positive reactions from peers (Howes, Hamilton, & Matheson, 1994). Since high quality teacher-student relationships are beneficial for students in general, it is quite possible that supportive teacher-student relationships could help protect victims of child abuse from subsequent involvement in youth violence and IPV.

Teacher-student relationships appear to have differential effects on children. Supportive teacher-student relationships lead to more prosocial behavior among children who have insecure attachments with their mothers (Copeland-Mitchell, Denham, & DeMulder, 1997), are associated with less aggression among children whose parents had

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a history of experiencing parental rejection (Hughes et al., 1999), and are more beneficial for children with behavior problems and high levels of aggression (Hamre & Pianta, 2001). Similarly, conflict in student-teacher relationships was strongly related to the behavior problems of children who were rated by teachers as being more aggressive (Ladd & Burgess, 2001). Others have not found similar results. Meehan, Hughes, and Cavell (2003) attribute these differences in findings to the different sources of information used in the various studies. Studies using more direct measures of parent and child behavior, such as the study conducted by Meehan and colleagues in 2003, find different results compared to studies using more indirect measures of parent and child behavior. Direct measures might be related to positive response bias and defensiveness. Contrary findings emphasize the need for further research examining the impact of teacher-student relationships on students' adjustment.

Just as teacher-student relationships impact students' behavior, students' behavior might also influence the type of relationships students develop with their teachers. Differences in child temperament have been shown to elicit different styles of caregiving, so it is plausible that differences in child temperament could elicit different responses from teachers (Goldsmith & Alansky, 1987). Problem behaviors exhibited by students could have negative effects on teacher-student relationships, as was the case when students' disruptive and antisocial behaviors were associated with rejection from teachers, less teacher support, more punishment from teachers, more criticism from teachers, and less quality teacher-student relationships (Birch & Ladd, 1998). Existing research on teacher-student relationships demonstrates the impact the teacher-student

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relationship can have on students' behavior and functioning in general. Little is known on how teacher-student relationships affect the behavior and functioning of victims of child maltreatment, though.

**Expanding the Literature**

The current study seeks to expand the existing literature in five ways. Previous studies examining the cycle of violence have presented a wide array of results depending on the subtypes of maltreatment examined, whether violence victimization or perpetration is measured, and if gender is the focus of the study (Heyman & Sleps, 2002). This study includes various subtypes of maltreatment, victimization and perpetration, and males and females. By examining relationships among all of these variables, results can be incorporated in one study. In order to develop prevention and intervention efforts, it is important to learn about factors that could impact the cycle of violence. High-quality relationships with teachers could decrease the likelihood that victims of maltreatment are involved in subsequent violence. Researchers have examined how teacher-student relationships impact students' behavior in general (e.g., Hamre & Pianta, 2006); however, fewer studies have considered how teacher-student relationships affect the cycle of violence. Examining the role of teacher-student relationships could provide the field with important information about prevention and intervention. A third limitation of this area of research is the problems with sampling. A nationally representative sample will be used in the current study. Studies in this area of literature often use clinical samples (Hershkowitz, 2011), samples drawn from CPS and court reports (Mersky, 2010), and samples of convenience from college and high school

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campuses (Shen, 2009; Fuertes, 2010). These samples reduce the generalizability of the results (Fuertes, 2010) and only allow the examination of severe and substantiated cases of abuse (Ibabe, 2010), which are limitations addressed by the use of a representative sample. Previous research has found varying results based on the subtype of maltreatment experienced by children and based on the gender of the victims, so it has been recommended that studies explore each subtype of maltreatment and the relationships among variables for males and females separately (Petrenko et al., 2012). Many studies have continued to consider maltreatment in general and have not examined differences by gender, though. To advance the literature, relationships in the current study are investigated among subtypes of maltreatment, rather than child maltreatment in general, and relationships will be examined for males and females separately. Lastly, the current study is expanding on the work of Fang and Corso (2007) by including data from Wave IV of the Add Health dataset and by examining the effect of teacher support on the cycle of violence found in Fang and Corso's study. Since respondents were older during Wave IV of the data collection, they had a longer history of intimate relationships which could provide more information about intimate partner violence. Examining the role of teacher support could provide information about intervention strategies.

**Hypotheses**

Given the stability of aggression and the demonstrated association between child maltreatment and involvement in violence, it was hypothesized that exposure to child maltreatment would predict youth's engagement in youth violence and IPV as either victims or perpetrators. Previous studies exploring the relationships between child

maltreatment and subsequent violence suggest that the relationship between child

maltreatment and IPV is mediated by youth violence victimization and perpetration,

therefore it was expected that involvement in youth violence would mediate the

relationship between IPV and child maltreatment (Fang & Corso, 2007). Some subtypes

of maltreatment have been associated with the perpetration of violence, while other types

of abuse have been linked with victimization (Bevan & Higgins, 2002; Daigneault et al.,

2009; Wekerle et al., 2001), thus it was hypothesized that some of the relationships in

the model would vary by subtype. It was also hypothesized that these relationships

would be moderated by gender. Since one of the goals of the study was to identify ways

to intervene in the cycle of violence and prevent future violence, the role of teacher

support was examined. It was hypothesized that the relationships between child

maltreatment, adolescent violence, and IPV would be moderated by teacher support.

High-quality teacher-student relationships have been shown to reduce problem behaviors

and improve functioning of children (Hamre & Pianta, 2006; Hughes, Cavell, &

Jackson, 1999). It was hypothesized that close, supportive relationships with teachers

would decrease maltreated children's risk for youth violence and subsequent IPV.

CHAPTER III

METHODS

**Sample and Data Collection Methods**

The National Longitudinal Study of Adolescent Health (Add Health) dataset was used in the current study. This longitudinal, nationally representative sample was collected by the Carolina Population Center, University of North Carolina at Chapel Hill.

Add Health used a school-based design. A primary sampling frame was obtained from the Quality Education Database (QED). A stratified sample of 80 high schools was selected from the primary sampling frame of 26,666 schools. Schools were defined as high schools if students could reach the 11th grade and if more than 30 students were enrolled. The sample was stratified by region, urbanicity, school type (public, private, parochial), ethnicity, and size. A feeder school, such as a junior high school or middle school, was selected for each high school that was selected. If the junior high or middle school was expected to send at least five students to the high school, it was considered a feeder school for that high school. If the high school included $7^{th}$ or $8^{th}$ grades, then the high school was its own feeder school. This resulted in a pair of schools from 80 different communities. More than 70 percent of the originally selected schools (52 high schools) agreed to participate in the study. Additional high schools were selected to replace the 28 high schools that chose not to participate. Overall, 79 percent of the high schools and feeder schools that were asked to participate in the study agreed to do so.

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The final sample includes 132 high schools and feeder schools. The number of students enrolled in each school varied from less than 100 students to more than 3,000 students. Schools were located in urban, suburban, and rural areas. Schools were from the Northeast, South, Midwest, and West regions of the country.

From 1994 to 1995, Wave I data collection occurred. Parental consent was obtained for students to be involved in the study. In-school questionnaires were administered to these students from September 1994 to April 1995. The questionnaires were administered for each school on one day during one 45- to 60-minute class period. The number of students who completed the questionnaires totaled 90, 118. Items on the questionnaire examined students' backgrounds, parents' backgrounds, school context, friendships, extracurricular activities, expectations for the future, and health concerns. The questionnaire also allowed Add Health to identify students in rare but theoretically important groups.

Add Health gathered lists of students who were enrolled in each school. A core sample was made up of all of the students who completed the in-school questionnaire and students who did not complete the in-school questionnaire but were listed on the school roster. Informed consent was obtained for students to be interviewed. The sample was stratified in each school by grade and sex. Roughly 17 students from each strata were chosen. Approximately 200 students from each pair of schools were chosen. The core sample is nationally representative and includes 12,105 adolescents in grades 7 through 12.

Based on answers that students provided on the in-school survey, Add Health collected supplemental samples. These supplemental samples were selected for inclusion based on ethnicity (Cuban, Puerto Rican, and Chinese), genetic relatedness to siblings (twins, full siblings, half siblings, and unrelated adolescents living in the same household), adoption status, and disability. Black adolescents with highly educated parents were also recruited as a supplemental sample. All of the students from 16 schools were selected to be part of the supplemental samples so social networks could be examined. Due to the oversampling of certain minority groups, these groups' representations in the data might be higher than in the general population. Sample weights were assigned to account for this.

A total of 20,745 students from the core sample and supplemental samples were interviewed in their homes for 90-minutes. These participants make up 79 percent of all sampled students in all of the groups. A Computer-Assisted Personal Interview and an Audio Computer-Assisted Self Interview were administered. Sensitive questions were asked over a headset and respondents would enter their responses on a laptop.

Caregivers, who were typically the students' mothers, completed a 30-minute op-scan interviewer-assisted interview during Wave I data collection. More than 85 percent of caregivers of participating adolescents completed this interview. These interviews collected data about heritable health conditions; marriage and intimate relationships; involvement in volunteer, civic, or school activities; health-related behaviors; education; employment; household income and economic assistance; caregiver-adolescent communication and interaction; the caregiver's familiarity with the adolescent's friends

and friends' caregivers, and neighborhood characteristics. School administrators also completed a 30-minute questionnaire in Wave I.

Wave II data collection occurred in 1996. Adolescents were in grades 8 through 12 at this time. Students who were in the 12th grade during Wave I were not included in this sample, since they did not meet the grade requirement. A small number of students who were interviewed in Wave II were not participants from the Wave I sample. Another in-home interview was completed with 14,738 students and another questionnaire was completed by school administrators. Similar to the Wave I data collection, a Computer-Assisted Personal Interview and an Audio Computer-Assisted Self Interview were administered. Sensitive questions were asked over a headset and respondents would enter their responses on a laptop. During Wave II, when respondents entered their responses on the laptop, they used a monthly Event History Calendar. It was designed to help respondents remember when events occurred and increase the reliability of responses. Respondents saw a calendar with public events listed on it, and they entered their personal and relationship events on that calendar. The calendar could be accessed at any time during the interview and dates could be corrected after they were entered.

After additional informed consent was obtained, an in-home interview was completed during Wave III data collection from 2001 to 2002. Students who were interviewed in Wave I, but were not included in Wave II of data collection, were interviewed at this time. The 15,197 participants who completed this in-home interview were between the ages of 18 and 26 years during Wave III. Similar to the in-home

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interview in Wave I, sensitive questions were asked during a self-administered interview, while other questions were asked during the Computer-Assisted Personal Interview.

When participants from Wave I were between the ages of 24 and 32 in 2008 and 2009, Wave IV of data collection occurred. Fifty-two of the individuals were 33 and 34. Add Health located 92.5% of the sample and interviewed 80.3% of the participants. Wave IV data collection consisted of an in-home interview completed with 15,701 participants.

The Add Health dataset includes 9,421 respondents who were interviewed at Waves I, II, III, and IV of data collection and who also had a sample weight. Some of these individual cases were not included in the analyses if they were missing data on the exogenous variables. The sample in the current study consisted of 9,001 respondents.

**Study Aims**

The current study sought to determine how child maltreatment is related to involvement in youth violence and IPV, and the impact teacher support may have on this cycle of violence. By examining the impact of child abuse on future relationships and by exploring the impact of teacher support more closely, it was hoped that areas for prevention and intervention could be identified. This study aimed to answer the following questions: Are the relationships between various forms of child maltreatment and IPV perpetration and victimization mediated by youth violence perpetration and victimization? Are these relationships moderated by teacher support; does the model

vary for children who receive high levels of teacher support compared to those who receive low levels of teacher support? Does the model vary for boys and girls?

**Measures**

The Add Health team wanted to gather information about a wide array of interests and very broad areas of mental, physical, emotional, and sexual health. Thus, they did not use intact scales from literature or complete instruments. Items were developed by examining the literature, modifying items, pilot testing items, and using a variety of methods to validate items.

Based on the types of abuse included in previous research, and the variables included in the Add Health data, four child abuse variables were included in this study. These variables were child physical abuse, child sexual abuse, child emotional abuse, and child neglect. The items used in the current study and the timeline of when items were collected are listed in Table 1. Table 2 lists the descriptive statistics of the items used in the current study, and the correlations of items are listed in Table 3.

Table 1
*Timeline for administration of items*

| Variable | Item | Wave | Year | Grade/Age |
|---|---|---|---|---|
| Physical Abuse (PHYS) | 1. Before your 18th birthday, how often did a parent or adult caregiver hit you with a fist, kick you, throw you down on the floor, into a wall, or down stairs? | 4 (retrospective) | 2008-2009 | 24-32 years old |
| Neglect (NEG1, NEG2) | 1. By the time you started 6th grade, how often had your parents or other adult caregivers left you home alone when an adult should have been with you? | 3 (retrospective) | 2001-2002 | 18-26 years old |
| | 2. How often had your parents or other adult caregivers not taken care of your basic needs, such as keeping you clean or providing food or clothing? | 3 (retrospective) | 2001-2002 | 18-26 years old |
| Emotional Abuse (EMO) | 1. Before your 18th birthday, how often did a parent or other adult caregiver say things that really hurt your feelings or made you feel like you were not wanted or loved? | 4 (retrospective) | 2008-2009 | 24-32 years old |

Table 1 Continued

| Variable | Item | Wave | Year | Grade/Age |
|---|---|---|---|---|
| Sexual Abuse (SEX) | 1. How often did a parent or other adult caregiver touch you in a sexual way, force you to touch him or her in a sexual way, or force you to have sexual relations? | 4 (retrospective) | 2008-2009 | 24-32 years old |
| Youth Violence Perpetration (YVP1, YVP2, YVP3) | 1. During the past 12 months, how often did each of the following things happen? You shot or stabbed someone. | 2 | 1996 | 8-12 grade |
| | 2. During the past 12 months, how often did each of the following things happen? You pulled a knife or gun on someone. | 2 | 1996 | 8-12 grade |
| | 3. During the past 12 months, you carried a weapon at school. | 2 | 1996 | 8-12 grade |
| Youth Violence Victimization (YVV1, YVV2, YVV3, YVV4) | 1. During the past 12 months, how often did each of the following things happen? Someone pulled a knife or gun on you. | 2 | 1996 | 8-12 grade |
| | 2. During the past 12 months, how often did each of the following things happen? Someone shot you. | 2 | 1996 | 8-12 grade |

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Table 1 Continued

| Variable | Item | Wave | Year | Grade/Age |
|---|---|---|---|---|
| | 3. During the past 12 months, how often did each of the following things happen? Someone cut or stabbed you. | 2 | 1996 | 8-12 grade |
| | 4. During the past 12 months, how often did each of the following things happen? You were jumped. | 2 | 1996 | 8-12 grade |
| IPV Perpetration (IPVP1, IPVP2, IPVP3) | 1. How often (have/did) you (threatened/threaten) (PARTNER) with violence, pushed or shoved (him/her), or thrown something at (him/her) that could hurt? | 4 | 2008-2009 | 24-32 years old |
| | 2. How often (have/did) you (slapped/slap), hit, or (kicked/kick) (PARTNER)? | 4 | 2008-2009 | 24-32 years old |
| | 3. How often (have/did) you (insisted/insist) on or (made/make) (PARTNER) have sexual relations with you when (he/she) didn't want to? | 4 | 2008-2009 | 24-32 years old |

Table 1 Continued

| Variable | Item | Wave | Year | Grade/Age |
|---|---|---|---|---|
| IPV Victimization (IPVV1, IPVV2, IPVV3) | 1. How often (has/did) (PARTNER) (insisted/insist) on or (made/make) you have sexual relations with (him/her) when you didn't want to? | 4 | 2008-2009 | 24-32 years old |
| | 2. How often (has/did) (PARTNER) (threatened/threaten) you with violence, (pushed/push) or (shoved/shove) you, or (thrown/throw) something at you that could hurt? | 4 | 2008-2009 | 24-32 years old |
| | 3. How often (has/did) (PARTNER) (slapped/slap), hit, or (kicked/kick) you? | 4 | 2008-2009 | 24-32 years old |
| Teacher Support | 1. How much do you feel that your teachers care about you? | 1 | 1994-1995 | 7-12 grade |

Table 2
*Descriptive statistics for females*

| Variable | Item | Mean | SD | Missing | Skewness | Kurtosis |
|---|---|---|---|---|---|---|
| Physical Abuse (PHYS) | 1. Before your 18th birthday, how often did a parent or adult caregiver hit you with a fist, kick you, throw you down on the floor, into a wall, or down stairs? | .17 | .38 | 42 | 1.78 | 1.16 |
| Neglect* (NEG1, NEG2) | | .11 | .24 | 100 | 1.97 | 3.09 |
| | 1. By the time you started 6th grade, how often had your parents or other adult caregivers left you home alone when an adult should have been with you? | .19 | .39 | 286 | 1.60 | .55 |
| | 2. How often had your parents or other adult caregivers not taken care of your basic needs, such as keeping you clean or providing food or clothing? | .04 | .20 | 162 | 4.57 | 18.90 |
| Emotional Abuse (EMO) | 1. Before your 18th birthday, how often did a parent or other adult caregiver say things that really hurt your feelings or made you feel like you were not wanted or loved? | .31 | .46 | 55 | .84 | -1.30 |
| Sexual Abuse (SEX) | 1. How often did a parent or other adult caregiver touch you in a sexual way, force you to touch him or her in a sexual way, or force you to have sexual relations? | .07 | .26 | 46 | 3.38 | 9.41 |
| Youth Violence Perpetration* (YVP1, YVP2, YVP3) | | .02 | .10 | 10 | 6.53 | 48.20 |
| | 1. During the past 12 months, how often did each of the following things happen? You shot or stabbed someone. | .01 | .08 | 10 | 12.36 | 150.73 |

Table 2 Continued

| Variable | | Item | Mean | SD | Missing | Skewness | Kurtosis |
|---|---|---|---|---|---|---|---|
| | 2. | During the past 12 months, how often did each of the following things happen? You pulled a knife or gun on someone. | .02 | .14 | 11 | 6.88 | 45.39 |
| | 3. | During the past 12 months, you carried a weapon at school. | .03 | .16 | 12 | 5.83 | 31.98 |
| Youth Violence Victimization* (YVV1, YVV2, YVV3, YVV4) | | | .03 | .10 | 11 | 4.28 | 20.21 |
| | 1. | During the past 12 months, how often did each of the following things happen? Someone shot you. | .00 | .06 | 12 | 17.83 | 316.06 |
| | 2. | During the past 12 months, how often did each of the following things happen? Someone pulled a knife or gun on you. | .05 | .22 | 14 | 4.16 | 15.35 |
| | 3. | During the past 12 months, how often did each of the following things happen? Someone cut or stabbed you. | .02 | .13 | 12 | 7.40 | 52.73 |
| | 4. | During the past 12 months, how often did each of the following things happen? You were jumped. | .04 | .20 | 12 | 4.61 | 19.27 |
| IPV Perpetration* (IPVP1, IPVP2, IPVP3) | | | .10 | .22 | 143 | 2.10 | 3.15 |
| | 1. | How often (have/did) you (insisted/insist) on or (made/make) (PARTNER) have sexual relations with you when (he/she) didn't want to? | .02 | .13 | 156 | 7.56 | 55.17 |
| | 2. | How often (have/did) you (slapped/slap), hit, or (kicked/kick) (PARTNER)? | .13 | .33 | 145 | 2.27 | 3.15 |

Table 2 Continued

| Variable | | Item | Mean | SD | Missing | Skewness | Kurtosis |
|---|---|---|---|---|---|---|---|
| | 3. | How often (have/did) you (threatened/threaten) (PARTNER) with violence, pushed or shoved (him/her), or thrown something at (him/her) that could hurt? | .15 | .36 | 148 | 1.91 | 1.67 |
| IPV Victimization* (IPVV1, IPVV2, IPVV3) | | | .11 | .23 | 145 | 2.24 | 4.21 |
| | 1. | How often (has/did) (PARTNER) (insisted/insist) on or (made/make) you have sexual relations with (him/her) when you didn't want to? | .06 | .23 | 151 | 3.84 | 12.78 |
| | 2. | How often (has/did) (PARTNER) (slapped/slap), hit, or (kicked/kick) you? | .08 | .28 | 149 | 3.04 | 7.25 |
| | 3. | How often (has/did) (PARTNER) (threatened/threaten) you with violence, (pushed/push) or (shoved/shove) you, or (thrown/throw) something at you that could hurt? | .18 | .38 | 161 | 1.69 | .86 |
| Teacher Support | 1. | How much do you feel that your teachers care about you? | 1.50 | .50 | 42 | .00 | -2.00 |

*Note:* *Individual items were averaged and values were then calculated for constructed variable

Table 3
*Descriptive statistics for males*

| Variable | Item | Mean | SD | Missing | Skewness | Kurtosis |
|---|---|---|---|---|---|---|
| Physical Abuse (PHYS) | 1. Before your 18<sup>th</sup> birthday, how often did a parent or adult caregiver hit you with a fist, kick you, throw you down on the floor, into a wall, or down stairs? | .19 | .39 | 51 | 1.59 | .54 |
| Neglect* (NEG1, NEG2) | | .13 | .26 | 159 | 1.82 | 2.44 |
| | 1. By the time you started 6<sup>th</sup> grade, how often had your parents or other adult caregivers left you home alone when an adult should have been with you? | .21 | .41 | 363 | 1.82 | .09 |
| | 2. How often had your parents or other adult caregivers not taken care of your basic needs, such as keeping you clean or providing food or clothing? | .06 | .24 | 250 | 3.76 | 12.14 |
| Emotional Abuse (EMO) | 1. Before your 18<sup>th</sup> birthday, how often did a parent or other adult caregiver say things that really hurt your feelings or made you feel like you were not wanted or loved? | .22 | .41 | 70 | 1.39 | -.08 |
| Sexual Abuse (SEX) | 1. How often did a parent or other adult caregiver touch you in a sexual way, force you to touch him or her in a sexual way, or force you to have sexual relations? | .02 | .15 | 40 | 6.31 | 37.86 |
| Youth Violence Perpetration* (YVP1, YVP2, YVP3) | | .06 | .06 | 11 | 3.48 | 12.72 |
| | 1. During the past 12 months, how often did each of the following things happen? You shot or stabbed someone. | .03 | .16 | 16 | 6.07 | 34.88 |

Table 3 Continued

| Variable | Item | Mean | SD | Missing | Skewness | Kurtosis |
|---|---|---|---|---|---|---|
| | 2. During the past 12 months, how often did each of the following things happen? You pulled a knife or gun on someone. | .06 | .25 | 17 | 3.57 | 10.74 |
| | 3. During the past 12 months, you carried a weapon at school. | .08 | .27 | 14 | 3.13 | 7.78 |
| Youth Violence Victimization* (YVV1, YVV2, YVV3, YVV4) | | .09 | .19 | 16 | 2.46 | 6.02 |
| | 1. During the past 12 months, how often did each of the following things happen? Someone shot you. | .02 | .14 | 17 | 7.09 | 48.32 |
| | 2. During the past 12 months, how often did each of the following things happen? Someone pulled a knife or gun on you. | .15 | .36 | 17 | 1.95 | 1.82 |
| | 3. During the past 12 months, how often did each of the following things happen? Someone cut or stabbed you. | .05 | .21 | 17 | 4.25 | 16.05 |
| | 4. During the past 12 months, how often did each of the following things happen? You were jumped. | .13 | .33 | 17 | 2.25 | 3.07 |
| IPV Perpetration* (IPVP1, IPVP2, IPVP3) | | .07 | .19 | 143 | 2.89 | 7.96 |
| | 1. How often (have/did) you (insisted/insist) on or (made/make) (PARTNER) have sexual relations with you when (he/she) didn't want to? | .06 | .23 | 158 | 3.83 | 12.68 |
| | 2. How often (have/did) you (slapped/slap), hit, or (kicked/kick) (PARTNER)? | .05 | .23 | 146 | 3.96 | 13.68 |

Table 3 Continued

| Variable | | Item | Mean | SD | Missing | Skewness | Kurtosis |
|---|---|---|---|---|---|---|---|
| | 3. | How often (have/did) you (threatened/threaten) (PARTNER) with violence, pushed or shoved (him/her), or thrown something at (him/her) that could hurt? | .10 | .29 | 146 | 2.75 | 5.57 |
| IPV Victimization* (IPVV1, IPVV2, IPVV3) | | | .16 | .27 | 142 | 1.55 | 1.16 |
| | 1. | How often (has/did) (PARTNER) (insisted/insist) on or (made/make) you have sexual relations with (him/her) when you didn't want to? | .07 | .25 | 149 | 3.45 | 9.88 |
| | 2. | How often (has/did) (PARTNER) (slapped/slap), hit, or (kicked/kick) you? | .17 | .38 | 146 | 1.74 | 1.04 |
| | 3. | How often (has/did) (PARTNER) (threatened/threaten) you with violence, (pushed/push) or (shoved/shove) you, or (thrown/throw) something at you that could hurt? | .23 | .42 | 151 | 1.31 | -.28 |
| Teacher Support | 1. | How much do you feel that your teachers care about you? | 1.50 | .50 | 42 | .00 | -2.00 |

*Note:* *Individual items were averaged and values were then calculated for constructed variable

Table 4

*Correlations*

| Item | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | 12. | 13. | 14. | 15. | 16. | 17. | 18. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. PHY | | .18 | .39 | .07 | .13 | .06 | .07 | .06 | .03 | .08 | .06 | .07 | .06 | .08 | .09 | .07 | .10 | .11 |
| 2. SEX | | | .15 | .07 | .06 | **.02** | **.02** | **.01** | .02 | **.01** | **.01** | **.00** | .03 | .05 | .06 | .03 | .02 | .04 |
| 3. EMO | | | | .15 | .04 | **.02** | **.01** | .03 | **.00** | .02 | .03 | .03 | .05 | .09 | .11 | .11 | .06 | .07 |
| 4. NEG1 | | | | | .16 | **.01** | **.01** | .03 | **.00** | .04 | .03 | .04 | .03 | .02 | .02 | .03 | .03 | .04 |
| 5. NEG2 | | | | | | .03 | .03 | .02 | .02 | .03 | .02 | .03 | **.01** | **.02** | **.01** | **.02** | **.00** | **.01** |
| 6. YVP1 | | | | | | | .52 | .25 | .23 | .25 | .34 | .22 | **-.01** | .02 | .03 | .03 | .04 | .04 |
| 7. YVP2 | | | | | | | | .33 | .20 | .37 | .34 | .30 | .02 | .04 | .04 | .06 | .08 | .06 |
| 8. YVP3 | | | | | | | | | .12 | .21 | .21 | .19 | .03 | **.01** | .03 | .03 | .07 | .06 |
| 9. YVV1 | | | | | | | | | | .23 | .23 | .19 | **-.00** | **-.01** | **-.01** | .03 | .03 | .03 |
| 10. YVV2 | | | | | | | | | | | .35 | .41 | .02 | .03 | .05 | .06 | .11 | .09 |
| 11. YVV3 | | | | | | | | | | | | .28 | .03 | .03 | .05 | .04 | .07 | .07 |
| 12. YVV4 | | | | | | | | | | | | | .04 | **.01** | .04 | .06 | .09 | .09 |
| 13. IPVP1 | | | | | | | | | | | | | | .12 | .14 | .28 | .16 | .13 |
| 14. IPVP2 | | | | | | | | | | | | | | | .64 | .19 | .41 | .50 |
| 15. IPVP3 | | | | | | | | | | | | | | | | .19 | .41 | .50 |
| 16. IPVV1 | | | | | | | | | | | | | | | | | .21 | .23 |
| 17. IPVV2 | | | | | | | | | | | | | | | | | | .63 |
| 18. IPVV3 | | | | | | | | | | | | | | | | | | |

*Note:* Correlations are significant at *p* < .05 (two-tailed) except bold entries

During Wave III and Wave IV, respondents provided retrospective information about maltreatment that occurred during their childhood. Child emotional abuse was measured by the item, "Before your 18th birthday, how often did a parent or other adult caregiver say things that really hurt your feelings or made you feel like you were not wanted or loved?" Child physical abuse was measured by the item, "Before your 18th birthday, how often did a parent or adult caregiver hit you with a fist, kick you, or throw you down on the floor, into a wall, or down stairs?" Child sexual abuse was measured by the item, "How often did a parent or other adult caregiver touch you in a sexual way, force you to touch him or her in a sexual way, or force you to have sexual relations?" Child neglect was measured by the average of two items: "By the time you started 6th grad e, how often had your parents or other adult caregivers left you home alone when an adult should have been with you?" and "How often had your parents or other adult caregivers not taken care of your basic needs, such as keeping you clean or providing food or clothing?" The response categories for all of these items were one time, two times, three to five times, six to ten times, more than ten times, this never happened, refused, and don't know.

Due to the low base rates on these items, binary items were created indicating that the respondent either had or had not been a victim of that subtype of child maltreatment. If respondents reported "don't know" or "refused", it was coded as missing data. Descriptive statistics indicated that this occurred a small percentage of the time (.1%-4%). For the variable child neglect, the inter-item correlation values, which

are listed in Table 4, were calculated and the average scores of these items were then calculated to create the neglect variable.

Participation in youth violence was measured by the variables youth violence perpetration and youth violence victimization. These items were collected during Wave II. Youth violence perpetration was measured by three items. The first item was "During the past 12 months, how often did each of the following things happen? You pulled a knife or gun on someone." The response categories for this item were never, once, more than once, refused, and don't know. The second item was "During the past 12 months, how often did each of the following things happen? You shot or stabbed someone." The response categories for this item were never, once, more than once, refused, and don't know. The third item was "During the past 12 months, how often did each of the following things happen? You carried a weapon at school." The response categories were no, yes, refused, and don't know. Youth violence victimization was measured by three items: "During the past 12 months, how often did each of the following things happen? Someone shot you," "During the past 12 months, how often did each of the following things happen? Someone pulled a knife or gun on you," "During the past 12 months, how often did each of the following things happen? Someone cut or stabbed you," "During the past 12 months, how often did each of the following things happen? You were jumped." The response categories for these items were never, once, more than once, refused, and don't know.

Many of the items asked about severe forms of violence, making response rates low, so binary items were created indicating that the respondent either had or had not

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been involved in that act of youth violence. Occasional responses of "don't know" or "refused" were coded as missing data. The inter-item correlation values were calculated for these items and are listed in Table 4. The average scores of these items were calculated to create the variables youth violence perpetration and youth violence victimization.

Involvement in IPV was measured by the variables IPV perpetration and IPV victimization. During Wave IV of data collection, respondents were asked about their involvement in IPV. IPV perpetration was measured by the following items: "How often (have/did) you threatened (PARTNER) with violence, pushed or shoved (him/her), or thrown something at (him/her) that could hurt," "How often (have/did) you (slapped/slap), hit, or (kicked/kick) (PARTNER)," "How often (have/did) you (insisted/insist) on or (made/make) (PARTNER) have sexual relations with you when (he/she) didn't want to?" IPV victimization was measured by the following items: "How often (has/did) (PARTNER) (threatened/threaten) you with violence, (pushed/push) or (shoved/shove) you, or (thrown/throw) something at you that could hurt," "How often (has/did) (PARTNER) (slapped/slap), hit or (kicked/kick) you," How often (has/did) (PARTNER) (insisted/insist) on or (made/make) you have sexual relations with (him/her) when you didn't want to?" The response categories for these items were never; this has not happened in the past year, but it did happen before then; once in the last year of the relationship; twice in the last year of the relationship; three to five times in the last year of the relationship; six to ten times in the last year of the relationship; eleven to

twenty times in the last year of the relationship; more than twenty times in the last year of the relationship; refused; and don't know.

Binary items were created indicating that the respondent either had or had not been the perpetrator or victim of that violent act between intimate partners. The responses "don't know" and "refused" were coded as missing data. The inter-item correlation values were calculated for the three items measuring IPV perpetration and the three items measuring IPV victimization. These values are listed in Table 4. The average scores of these items were calculated to create the variables.

Levels of teacher support were measured by the item "How much do you feel that your teachers care about you?" The response categories were not at all, very little, somewhat, quite a bit, and very much. The level of teacher support was determined by examining the response options and distribution of scores to determine a cutoff for low versus high teacher support. If respondents reported that their teachers did not care about them at all or cared about them very little, it was considered a low level of teacher support. If students answered that their teachers cared about them somewhat, quite a bit, or very much, it was considered a high level of teacher support. Students provided information about teacher support during Wave I.

CHAPTER IV

RESULTS

**Model Identification**

The model displayed in Figure 1 was developed based on previous research

examining the relationships between child maltreatment, youth violence, and IPV. The

software program Mplus Version 7 was used to run a path analysis to determine if child

maltreatment increases the likelihood of involvement in IPV by increasing the

involvement in youth violence.

Initially, the model did not fit the data well (CFI=0.544, RMSEA=0.120),

according to criteria proposed by Hu and Bentler (1999). Modification indices indicated

that correlating the error terms of youth violence perpetration and youth violence

victimization would achieve better model fit. Research has shown that individuals who

perpetrate violence are often the victims of violence, as well (Rivera, Sheperd,

Farrington, Richmond, & Cannon, 1995). Additionally, youth violence victimization and

youth violence perpetration were measured using similar items of self-report.

Consequently, the items may have something in common that was not captured by that

measure. Correlating youth violence perpetration and youth violence victimization, as

shown in Figure 2, resulted in good model fit (CFI=0.967, RMSEA=0.034). A summary

of the goodness of fit indices can be found in Table 5. Estimates indicate that

experiencing child physical abuse was directly associated with youth violence

perpetration and victimization ($\beta = 0.094$, $p < .00$ and $\beta = 0.116$, $p < .00$), while child

neglect directly increased the risk of youth violence victimization ($\beta = 0.042$, $p < .00$). Youth violence victimization was a significant predictor of IPV perpetration and victimization ($\beta = 0.046$, $p < .02$ and $\beta = 0.138$, $p < .00$); youth violence perpetration was only a significant predictor of IPV victimization ($\beta = 0.042$, $p < .03$). Youth violence perpetration and victimization were correlated ($\beta = 0.470$, $p < .00$), and IPV perpetration and victimization were correlated ($\beta = 0.532$, $p < .00$). Child physical abuse and neglect both indirectly increased the likelihood of being a victim of IPV by increasing the likelihood of being a victim of youth violence ($\beta = 0.005$, $p < .03$ and $\beta = 0.006$, $p < .01$). Being a victim of child physical abuse also indirectly increased the likelihood of being a perpetrator of IPV by increasing the likelihood of being a victim of youth violence ($\beta = 0.016$, $p < .00$).
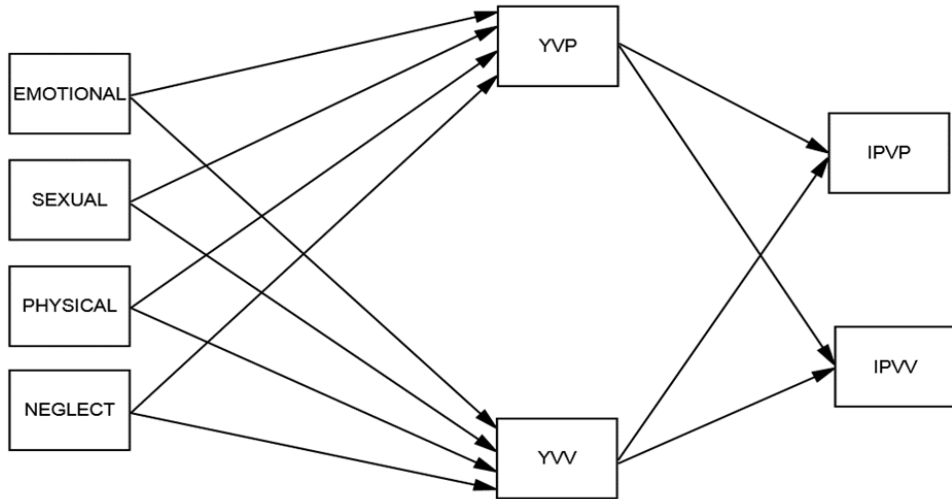
*Figure 1.* Hypothesized model.
*Note:* EMOTIONAL=child emotional abuse, SEXUAL=child sexual abuse, PHYSICAL=child physical abuse, NEGLECT=child neglect, YVP=youth violence perpetration, YVV=youth violence victimization, IPVP=intimate partner violence perpetration, IPVV=intimate partner violence victimization
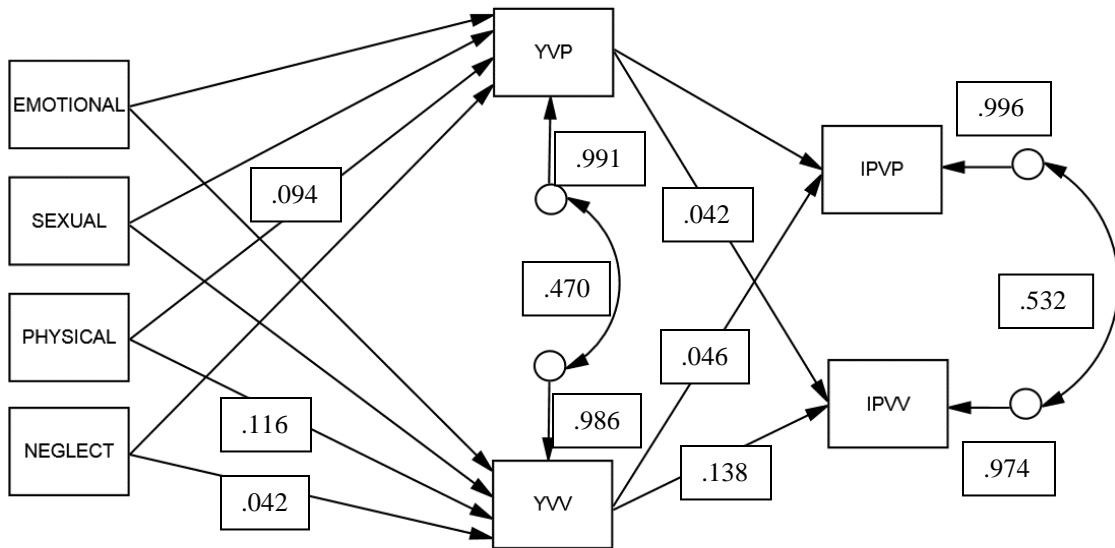
*Figure 2.* Revised hypothesized model
*Note:* EMOTIONAL=child emotional abuse, SEXUAL=child sexual abuse, PHYSICAL=child physical abuse, NEGLECT=child neglect, YVP=youth violence perpetration, YVV=youth violence victimization, IPVP=intimate partner violence perpetration, IPVV=intimate partner violence victimization, STDYX estimates reported

Table 5
*Goodness of fit indices*

|  | $x^2$ | Df | RMSEA | CFI | Modification Index |
|---|---|---|---|---|---|
| Model 1 | 1182.039 | 9 | 0.120 | 0.544 | 957.79 |
| Model 2 | 92.152 | 8 | 0.034 | 0.967 | |

*Note:* Model 1=Hypothesized model, Model 2=Revised hypothesized model

**Multiple Group Analyses**

To determine if this cycle of violence was moderated by gender, the model was examined for males and females using multiple group analyses. An unconstrained model, in which all parameters were freely estimated, was compared to a constrained model, in which each path was equal for males and females. The Satorra-Bentler chi square difference test showed that there was a statistically significant difference between the models ($x^2$=243.158, df=21, p<0.001), indicating that the associations in the model are not the same for boys and girls. Figure 3 displays the model for males, and Figure 4 displays the model for females. Results indicate that males who were the victims of child physical abuse were more likely to be the perpetrators and victims of youth violence ($\beta$ = 0.092, $p < .00$ and $\beta = 0.108$, $p < .00$). Youth violence victimization was a significant direct predictor of IPV perpetration and victimization ($\beta = 0.070$, $p < .01$ and $\beta = 0.149$, $p < .00$). Youth violence victimization and perpetration were correlated ($\beta = 0.464$, $p < .00$). There was also a correlation between IPV victimization and perpetration ($\beta = 0.521$, $p < .00$). Child physical abuse indirectly increased the likelihood of being a victim and perpetrator of IPV by increasing the risk of involvement in youth violence ($\beta = 0.016$, $p < .00$ and $\beta = 0.008$, $p < .05$). The same relationships were found for females. Female victims of child physical abuse were more likely to be the victims of youth violence victimization and perpetration ($\beta = 0.102$, $p < .00$ and $\beta = 0.076$, $p < .01$). Youth violence victimization was associated with IPV perpetration and victimization ($\beta = 0.058$, $p < .01$ and $\beta = 0.076$, $p < .01$). Youth violence perpetration and victimization were correlated ($\beta = 0.419$, $p < .00$), and IPV perpetration and victimization were

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correlated ($\beta = 0.581$, *p* < .00). Child physical abuse indirectly increased the risk of IPV perpetration and victimization by increasing the risk of being the victim of youth violence ($\beta = 0.006$, *p* < .05 and $\beta = 0.008$, *p* < .04). An additional relationship was found for females; youth violence perpetration was directly associated with IPV perpetration ($\beta = 0.044$, *p* < .03).

A second multiple group analysis was conducted to determine if the cycle of violence was moderated by teacher support. The constrained and unconstrained models for students with low levels of teacher support and students with high levels of teacher support were compared. The Satorra-Bentler chi square difference test indicated that there was a statistically significant difference between the models ($x^2$=198.932, df=21, p<0.001).

Four groups of participants were created based on information from the multiple group analyses (males with low levels of teacher support, males with high levels of teacher support, females with low levels of teacher support, females with high levels of teacher support). Multiple group analyses compared the four groups, while constraining one path at a time. The Satorra-Bentler chi square difference test was conducted for each analysis to determine if there was a statistically significant difference between the models. Results of the chi square difference tests are reported in Table 6. The only difference found was among males who reported low levels of teacher support ($x^2$=39.09, df=3, p<0.001). Among all four groups, individuals who were the victims of child physical abuse were more likely to be the victims and perpetrators of youth violence ($\beta = 0.029$, *p* < .00 and $\beta = 0.020$, *p* < .00). Youth violence victimization

directly increased the risk of being the perpetrator and victim of IPV ($\beta = 0.073$, $p < .01$ and $\beta = 0.188$, $p < .00$). Physical abuse was associated with youth violence victimization, which placed individuals at an increased risk for being the perpetrators and victims of IPV ($\beta = 0.002$, $p < .03$ and $\beta = 0.005$, $p < .01$). For males with high levels of teacher support and females with low and high levels of teacher support, youth violence perpetration was correlated with youth violence victimization ($\beta = 0.004$, $p < .00$). For males who reported low levels of teacher support, youth violence perpetration was more strongly correlated with youth violence victimization than it was among the other three groups of individuals ($\beta = 0.028$, $p < .00$). IPV perpetration and victimization were correlated for males with high levels of teacher support, females with low and high levels of teacher support ($\beta = 0.034$, $p < .00$), and males with low levels of teacher support ($\beta = 0.022$, $p < .00$). Figure 5 shows the model estimates when all paths were constrained to be equal across all four groups, except for the correlation between the residuals of youth violence perpetration and youth violence victimization, which was freely estimated for males with low levels of teacher support.
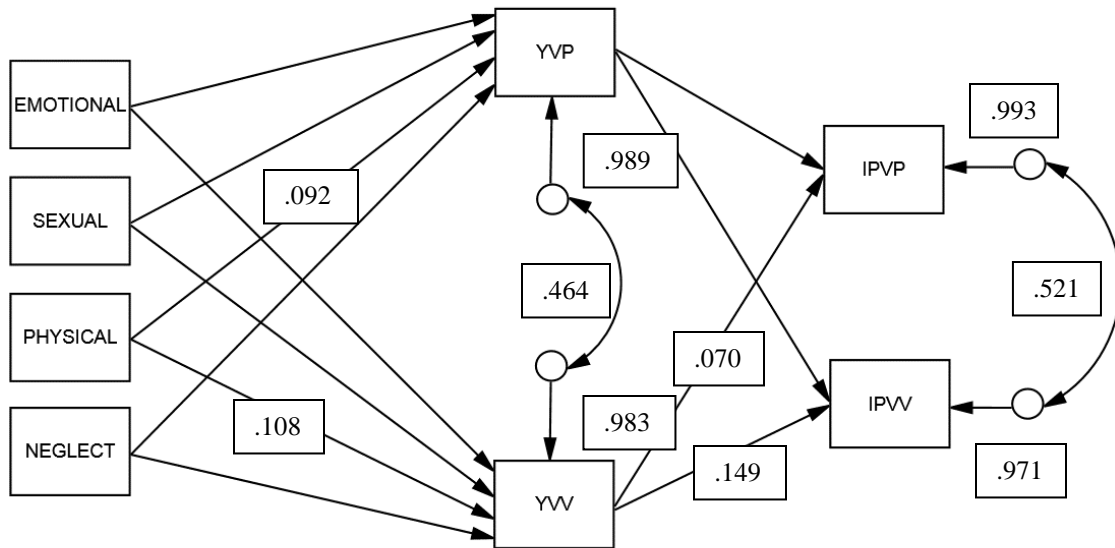
*Figure 3.* Model for males
*Note:* EMOTIONAL=child emotional abuse, SEXUAL=child sexual abuse, PHYSICAL=child physical abuse, NEGLECT=child neglect, YVP=youth violence perpetration, YVV=youth violence victimization, IPVP=intimate partner violence perpetration, IPVV=intimate partner violence victimization, STDYX estimates reported
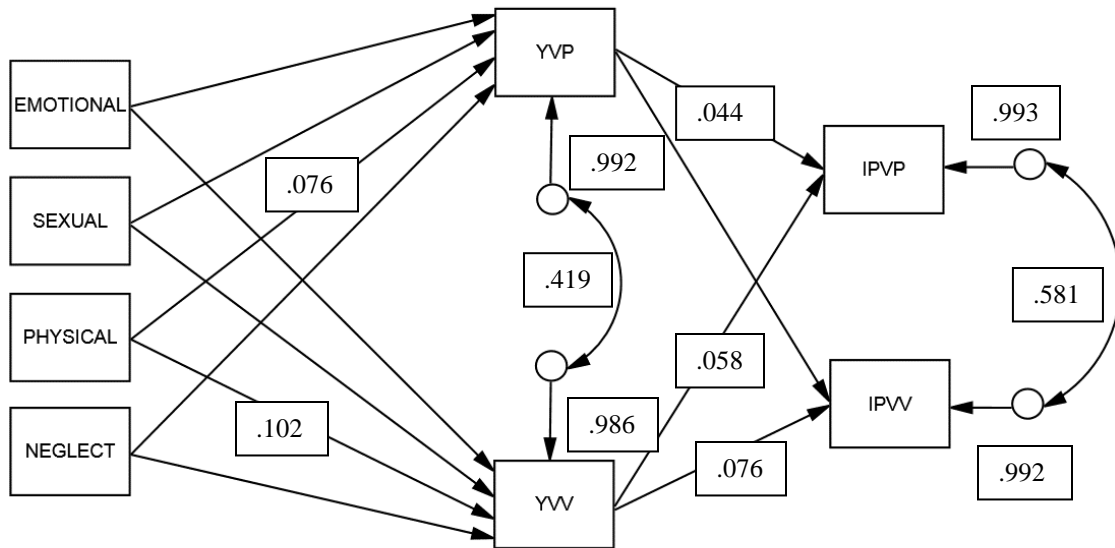
*Figure 4.* Model for females
*Note:* EMOTIONAL=child emotional abuse, SEXUAL=child sexual abuse, PHYSICAL=child physical abuse, NEGLECT=child neglect, YVP=youth violence perpetration, YVV=youth violence victimization, IPVP=intimate partner violence perpetration, IPVV=intimate partner violence victimization, STDYX estimates reported

Table 6

*Chi-square difference tests*

| | $x^2$ | df | p |
|---|---|---|---|
| IPVV ON YVP | 1.22 | 3 | 0.75 |
| IPVV ON YVV | 2.88 | 3 | 0.41 |
| IPVP ON YVV | 2.65 | 3 | 0.45 |
| IPVP ON YVP | 3.09 | 3 | 0.38 |
| YVV ON SEX | 5.25 | 3 | 0.15 |
| YVV ON EMO | 0.53 | 3 | 0.91 |
| YVV ON NEG | 2.12 | 3 | 0.55 |
| YVV ON PHY | 4.45 | 3 | 0.22 |
| YVP ON SEX | 0.66 | 3 | 0.88 |
| YVP ON EMO | 0.63 | 3 | 0.89 |
| YVP ON NEG | 1.99 | 3 | 0.57 |
| YVP ON PHY | 3.95 | 3 | 0.27 |
| YVP WITH YVV* | 39.09 | 3 | 0.00 |
| YVP WITH YVV** | 4.59 | 2 | 0.10 |

*Note: p<.001*

*Path constrained to be equal for males with low teacher support, males with high teacher support, females with low teacher support, and females with high teacher support
**Path constrained to be equal for males with high teacher support, females with low teacher support, and females with high teacher support
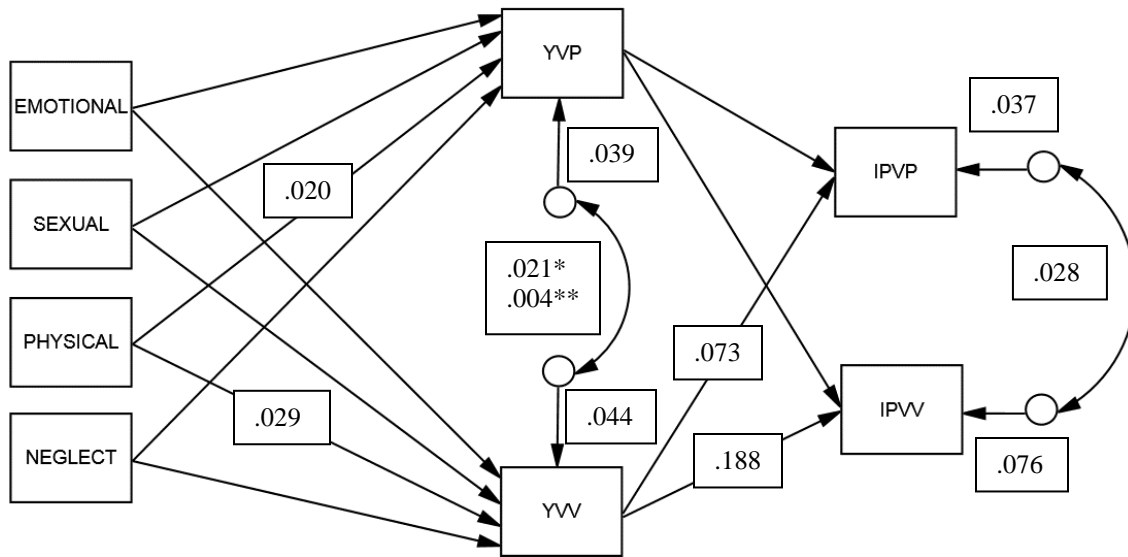
*Figure 5.* Model by teacher support
*Note:* EMOTIONAL=child emotional abuse, SEXUAL=child sexual abuse, PHYSICAL=child physical abuse, NEGLECT=child neglect, YVP=youth violence perpetration, YVV=youth violence victimization, IPVP=intimate partner violence perpetration, IPVV=intimate partner violence victimization, *Males with low teacher support, **Males with high teacher support, females with low teacher support, females with high teacher support, STDYX estimates reported

CHAPTER V

CONCLUSIONS

**Cycle of Violence**

The current study used an extant, nationally representative sample to examine if a supportive teacher-student relationship could prevent victims of child maltreatment from becoming involved in youth violence and IPV. The study also explored how these relationships vary for males and females.

One hypothesis was that the relationships between various forms of child maltreatment and IPV perpetration and victimization were mediated by youth violence perpetration and victimization. Complete mediation was found, indicating the strong impact that involvement in youth violence has on the relationship between child maltreatment and IPV. Individuals who were the victims of child physical abuse were more likely to be the victims of youth violence, which then indirectly increased their risk for being the perpetrators and victims of IPV. Previous research has also found that experiencing child physical abuse placed individuals at greater risk for being the victims of violence as youth (Fang & Corso, 2007; Holt et al., 2007; Smith, 2006; Weisel, 2005), and Fang and Corso reported that being victimized as youth was associated with involvement in IPV (Fang & Corso, 2007). Maltreatment has been shown to negatively affect children's attachment styles, making them more likely to form insecure attachments and display violence in relationships (Bowlby, 1969; Bowlby, 1988; Bradley, 2000; Main, 1996). Observing and experiencing child maltreatment might also

teach youth that violent behaviors are acceptable and effective, increasing the likelihood that children will imitate the aggressive behaviors they witness in their peer interactions and romantic relationships (Capaldi & Clark, 1998; O'Leary, 1988; Gilliom, Shaw, Beck, Schonberg, & Lukon, 2002).These results, along with previous research findings, emphasize the importance of intervening with children who have experienced physical maltreatment in order to help prevent subsequent violence. The present study and previous research also accentuate the need to examine the various subtypes of maltreatment separately, since the effects of abuse differ by subtype. Physical abuse has frequently been associated with externalizing behaviors, conduct problems, and violence, while sexual abuse, emotional abuse, and neglect have been linked with negative consequences such as anxiety, depression, and substance abuse (Berzenski & Yates, 2011). No internalizing symptoms were included in the current study, which might explain why no relationships were observed between sexual abuse, emotional abuse, and neglect.

A second hypothesis was that the relationships between child maltreatment, youth violence, and IPV would vary for boys and girls. The majority of the relationships between child maltreatment, youth violence, and IPV were similar for males and females. Though, youth violence perpetration was associated with IPV perpetration for females, but not males. These findings indicate that interventions aimed at preventing violence may be similarly effective for males and females. However, specific interventions should be tailored toward females who perpetrate violence as adolescents in order to lower their risk of perpetrating IPV as young adults.

The final hypothesis was that these relationships were moderated by teacher support; that the model varied for children who received high levels of teacher support compared to those who received low levels of teacher support. Contrary to what was hypothesized, most of the relationships among child maltreatment, youth violence, and IPV were not impacted by levels of teacher support. The proposed model fit the data similarly for males with high teacher support, females with high teacher support, and females with low teacher support. One slight difference was noted among males with low levels of teacher support. Youth violence perpetration was more highly associated with youth violence victimization among males who were the victims of child physical abuse and who reported low levels of teacher support. Improving the teacher-student relationship among male victims of child physical abuse could help decrease these students' involvement in youth violence.

No hypotheses were made about the relationship between youth violence perpetration and youth violence victimization. It is possible that students' individual characteristics are associated with their low levels of teacher support, which are also related to their involvement in youth violence perpetration and victimization. Future research is necessary to better understand this relationship.

The unanticipated results about the effects of teacher support could be related to some of the limitations of the data collected about teacher support. Students were in the 7-12 grades when they reported how much their teachers cared about them. As students get older, the normative level of warmth from teachers declines and students rely less on support from teachers and depend more on peer support (Jerome, Hamre & Pianta, 2008;

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O'Connor, 2010; O'Connor & McCartney, 2007). Perhaps a high level of teacher support in junior high and high school impacts the cycle of violence differently and is less effective at preventing violence. Exploring the impact of supportive teacher-student relationships during elementary school might provide more useful information about how to prevent involvement in violence among victims of childhood maltreatment.

Students reported how supportive their teachers were during the current academic year. No information was included in this study about teacher-student relationships across previous years, so it is unknown if students had a history of close or conflictual relationships with teachers. Previous research has found that warmth in student-teacher relationships is not stable from year to year (Mashburn, Hamre, Downer, & Pianta, 2006; Silver et al., 2005), so students who reported feeling cared about in this study might not have a history of feeling supported during previous academic years. While continuous teacher support could reduce the effects of risk factors, such as child maltreatment, only one or two years of a supportive teacher-student relationship may not be sufficient to impact children's development and functioning (Spilt, Hughes, Wu, & Kwok, 2012).

A study conducted by Hughes (2011) found that teacher and student reports assessed different constructs of teacher-student relationship quality. Only student report was included in this study. Perhaps an effect on the cycle of violence might have been found if teacher report could have been included in the current study and more aspects of the teacher-student relationship could have been examined.

**Limitations**

In addition to the limitations regarding teacher support, there are several other limitations that may have impacted the results of this study. Firstly, the retrospective collection of data about child maltreatment might have resulted in child maltreatment being underreported due to errors in people's memory. Studies have found that when retrospective data collection methods are used, child maltreatment is slightly under reported (Brown, Craig, Harris, Handley, and Harvey, 2007). Much of the literature examining child maltreatment uses retrospectively collected data. While this is a limitation of this body of literature, other methods of data collection have their own set of shortcomings. Collecting data about child abuse throughout an individual's childhood creates ethical dilemmas because researchers would be required to report any suspected child abuse. Identifying child maltreatment in court records limits data collection to only the extreme cases and could make results less generalizable. Secondly, a limited number of items were used to measure the variables child physical abuse, child emotional abuse, and child sexual abuse. Including more items could have increased the reliability of the measures, allowing underlying constructs to be more thoroughly assessed, and the variability in exposure to abuse to be examined. A third limitation is that only one source of information was used. While the Add Health data gather a great deal of information about children from self-report, no parent or teacher reported information was included in the current study. An additional limitation is that the Add Health data do not indicate if the individuals are involved in mutual perpetration and victimization, and if so, who initiated the violence. Another limitation of the study is that items only asked about child

maltreatment experienced by caregivers and parents. Rates of child abuse might have differed if participants reported any maltreatment they experienced. The Add Health dataset also does not include information about children who were exposed to violence in their home, but who were not directly maltreated. It is unknown if simply being observing violence would have a similar impact on individuals' functioning and future relationships. Lastly, while creating binary items allowed for better model fit, it added another limitation to this study because there is no longer information about the severity or chronicity of violence.

**Future Research**

Many of these limitations could be addressed in future research in order to determine if a supportive teacher-student relationship could prevent involvement in violence among victims of child maltreatment. Future studies could include more information, such as levels of teacher support in previous years, maltreatment by adults other than caregivers, teachers' perceptions of the quality of the teacher-student relationship, and child characteristics that impact the teacher-student relationships. Since relationships in the current study varied by gender and by subtype of maltreatment, future research should continue to explore prevention and intervention strategies based on the subtype of maltreatment experienced and the gender of the victims. Researchers could also gain valuable information about the cycle of violence by distinguishing between children exposed to domestic violence and children directly experiencing child maltreatment. Another distinction that could be explored is that between individuals who are victimized and individuals who are both the perpetrators and victims of violence.

Including this additional information in future studies will provide a more thorough

picture of the complex relationships between the cycle of violence and the factors that

impact it.

REFERENCES

Andrews, J. A., Foster, S. L., Capaldi, D., & Hops, H. (2000). Adolescents and family

    predictors of physical aggression, communication, and satisfaction in young adult

    couples: A prospective analysis. *Journal of Consulting and Clinical Psychology,*

    *68,* 195-208. doi: 10.1037//0022-006X.68.2.I95

Arias, I. (2004). The legacy of child maltreatment: Long-term health consequences for

    women. *Journal of Women's Health, 13*, 468-473.

Bandura, A. (1977). *Social Learning Theory.* Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1973). *Aggression: A social learning analysis.* Englewood Cliffs, NJ:

    Prentice Hall.

Banyard, V. L., Arnold, S., & Smith, J. (2000). Childhood sexual abuse and dating

    experiences of undergraduate women. *Child Maltreatment, 5,* 39-48. doi:

    10.1177/1077559500005001005

Barnett, D., Ganiban, J., & Cicchett, D. (1999). Maltreatment, negative expressivity, and

    the development of Type D attachments from 12- to 24-months of age.

    *Monographs of the Society for Research in Child Development, 64,* 97-118. doi:

    10.1111/1540-5834.00035

Barnett, D., Manly, J. T., & Cicchett, D. (1993).Continuing toward an operational

    definition of psychological maltreatment. *Development and Psychopathology, 3,*

    19-29.

Berzenski, S. R., & Yates, T.M. (2011). Classes and consequences of multiple

maltreatment: A person-centered analysis. *Child Maltreatment, 16,* 250-261.

Bevan, E., & Higgins, D. J. (2002). Is domestic violence learned? The contribution of five forms of child maltreatment to men's violence and adjustment. *Journal of Family Violence, 17,* 223-245.

Birch, S. H., & Ladd, G. W. (1998). Children's interpersonal behaviors and the teacher child relationship. *Developmental Psychology*, *34,* 934–946.

Black, D. A., Heyman, R. E., & Slep, A. M. S. (2001). Risk factors for male-to-female partner sexual abuse. *Aggression and Violent Behavior, 6,* 269-280.

Bolton, F. G., Morris, L. A., & MacEachron, A. E. (1989). Males at risk: The other side of child sexual abuse. Newbury Park: Sage Publications.

Boney-McCoy, S., & Finkelhor, D. (1995). Prior victimization: A risk factor for child sexual abuse and for PTSD-related symptomatology among sexually abused youth. *Child Abuse & Neglect, 19,* 1401-1421.

Bongers, I. L., Koot, H. M., van der Ende, J., & Verhulst, F. C. (2003). The normative development of child and adolescent problem behavior. *Journal of Abnormal Psychology, 112,* 179–192.

Bowlby, J. (1988). A secure base: Clinical applications of attachment theory. London: Routledge.

Bowlby, J. (1969). Attachment and loss: Vol. 1: Attachment. London: The Hogarth Press and The Institute of Psycho-Analysis.

Bradley, S. J. (2000). *Affect regulation and the development of psychopathology*. New York: Guilford.

Brody, L. R. (1985). Gender differences in emotional development: A review of theories

and research. *Journal of Personality, 53,* 102-149.

Broidy, L. M., Nagin, D. S., Tremblay, R. E., Bates, J. E., Brame, B., Dodge, K. E., et al.

(2003). Developmental trajectories of childhood disruptive behaviors and

adolescent delinquency; A six site, cross-national study. *Developmental*

*Psychology, 39,* 222-245.

Brown, G. W., Craig, T. K. J., Harris, T. O., Handley, R. V., & Harvey, A. L. (2007).

Validity of retrospective measures of early maltreatment and depressive episodes

using the Childhood Experience of Care and Abuse (CECA) instrument—A life-

course study of adult chronic depression—2. *Journal of Affective Disorders, 103,*

217-224. doi: 10.1016/j.jad.2007.06.003

California Welfare and Institutes Code. (2009). *§* 300, California Statutes.

Capaldi, D. M., & Clark, S. (1998). Family predictors of aggression toward female

partners for young at-risk males: A comparison of mediational hypotheses.

*Developmental Psychology, 34,* 1200-1209.

Cash, S. (2001). Risk assessment in child welfare: The art and science. *Children and*

*Youth Services Review, 23,* 811–830.

Chang, J. C., Cluss, P. A., Ranieri, L., Hawker, L., Buranosky, R., Dado, D., et al.

(2005). Health care interventions for intimate partner violence: What women

want. *Women's Health Issues, 15,* 21-30.

Child and Family Services Act, R.S.O. (1990). C.11, s.37(2).

Cicchetti, D., Rogosch, F. A., & Toth, S. L. (2006). Fostering secure attachment in

infants in maltreating families through preventive interventions. *Development and Psychopathology, 18,* 623-649. doi: 10.1017/S095479406060329

Cicchetti, D., Toth, S. L., & Lynch, M. (1995). Bowlby's dream comes full circle: The application of attachment theory to risk and psychopathology. In T. H. Ollendick, & R. J. Prinz (Eds.), *Advances in clinical child psychology* (pp. 1–75). New York: Plenum.

Coid, J., Petruckevitch, A., Feder, G., Chung, W., Richardson, J., & Moorey, S. (2001). Relation between childhood sexual and physical abuse and risk of revictimisation in women: A cross-sectional survey. *Lancet, 358*(9280), 450–454.

Crick, N.R., & Bigbee, M.A. (1998). Relational and overt forms of peer victimization: A multiinformant approach. *Journal of Consulting and Clinical Psychology*, *66*, 337–347.

Crick, N. R., Casas, J. F., Nelson, D. A. (2002). Toward a more comprehensive understanding of peer maltreatment: Studies of relational victimization. *Current Directions in Psychological Science, 11,* 98-101.

Daigneault, I. Hebert, M., & McDuff, P. (2009). Men's and women's childhood sexual abuse and victimization in adult partner relationships: A study of risk factors. *Child Abuse & Neglect, 33,* 638-647.

DeKeseredy, W. S., & MacLeod, L. (1997). *Woman abuse: A sociological story*. Toronto, Canada: Harcourt Brace.

Delsol, C., & Margolin, G. (2004). The role of family-of-origin violence in men's marital violence perpetration. *Clinical Psychology Review, 24,* 99-122.

Drake, B., & Pandey, S. (1996). Understanding the relationship between neighborhood

poverty and specific types of child maltreatment. *Child Abuse & Neglect*, *20*,

1003–1018.

Edleson, J.L. (2006). A response system for children exposed to domestic violence:

Public policy in support of best practices. In Feerick, M. & Silverman,

G.B.(Eds.). *Children Exposed to Violence* (pp. 191-211). Baltimore, MD:

Brookes.

Ehrensaft, M. K., Cohen, P., Brown, J., Smailes, E., Chen, H., & Johnson, J. G.

(2003). Intergenerational transmission of partner violence: A 20-year prospective

study. *Journal of Consulting and Clinical Psychology, 71,* 741-753. doi:

10.1037/0022-006X.71.4.741

Elliott, K., & Urquiza, A. (2006). Ethnicity, culture, and child maltreatment. *Journal of

Social Issues, 62,* 787-809.

Elinoff, M. J., Chafouleas, S. M., & Sassu, K. A. (2004). Bullying: Considerations for

defining and intervening in school settings. *Psychology in the Schools, 41(8),*

887-897.

English, D. J., Graham, J. C., Litrownik, A. J., Everson, M., & Bangdiwala, S. I. (2005).

Defining maltreatment chronicity: Are there differences in child outcomes? *Child

Abuse and Neglect, 29,* 575-595.

English, D. J., Thompson, R., Graham, J. C., & Briggs, E. C. (2005). Toward a

definition of neglect in young children, *Child Maltreatment, 10,* 190-206. doi:

10.1177/1077559505275178

Fang, X., & Corso, P. S. (2007). Child maltreatment, youth violence, and intimate

    partner violence. *American Journal of Preventive Medicine, 33,* 281-290.

    doi:10.1016/j.amepre.2007.06.003

Feiring, C., Rosenthal, S., & Taska, L. (2000). Stigmatization and the development of

    friendships and romantic relationships in adolescent victims of sexual abuse.

    *Child Maltreatment, 5,* 311-322. doi: 10.1177/1077559500005004003

Feldman, C. M. (1997). Childhood precursors of adult interpartner violence. *Clinical*

    *Psychology: Science and Practice, 4,* 307-334.

Fergusson, D. M., & Lynskey, M. T. (1997). Physical punishment/maltreatment during

    childhood and adjustment in young adulthood. *Child Abuse & Neglect, 21,* 617-

    630.

Follingstad, D. R., & DeHart, D. D. (2000). Defining psychological abuse of husbands

    toward wives: Contexts, behaviors and typologies. *Journal of Interpersonal*

    *Violence, 15(9),* 891−920.

Ford, J. D., Fraleigh, L. A., & Connor, D. F. (2010). Child abuse and aggression among

    seriously emotionally disturbed children. *Journal of Clinical Child & Adolescent*

    *Psychology, 39,* 25-34. doi: 10.1080/15374410903401104

Foshee, V. A., Bauman, K. E., & Linder, G. F. (1999). Family violence and the

    perpetration of adolescent dating violence: Examining social learning and social

    control processes. *Journal of Marriage and the Family, 61,* 331-342.

Fernandez-Fuertes, A. A., & Fuertes, A. (2010). Physical and psychological aggression

in dating relationships of Spanish adolescents: Motives and consequences. *Child Abuse and Neglect, 34,* 183-191.

Gidycz, C. A., Coble, C. N., Latham, L., & Layman, M. J. (1993). Sexual assault experience in adulthood and prior victimization experiences. *Psychology of Women Quarterly, 17,* 151-168.

Giles-Sims, J. (1983). Wife battering: A systems theory approach. New York: Guilford Press.

Gilliom, M., Shaw, D. S., Beck, J. E., Schonberg, M. A., & Lukon, J. L. (2002). Anger regulation in disadvantaged preschool boys: Strategies, antecedents, and the development of self-control. *Developmental Psychology, 38,* 222–235.

Goldsmith, H. H., & Alansky, J. (1987). Maternal and infant temperamental predictors of attachment: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 55,* 805-816.

Gomez, A. M. (2011). Testing the cycle of violence hypothesis: Child abuse and adolescent dating violence as predictors of intimate partner violence in young adulthood. *Youth Society, 43,* 171-192. doi: 10.1177/0044118X09358313

Gwartney-Gibbs, P., Stockard, J., & Bohmer, S. (1987). Learning courtship aggression: The influence of parents, peers, and personal experiences. *Family Relations, 36,* 276-282.

Halpern, C. T., Oslak, S. G., Young, M. L., Martin, S. L., & Kupper, L. L. (2001).

Partner violence among adolescents in opposite-sex romantic relationships: findings from the national longitudinal study of adolescent health. *American Journal of Public Health, 91*(10), 1679–1685.

Hamre, B. K., & Pianta, R. C. (2006). Student–teacher relationships. In G. C. Bear, & K. M. Minke (Eds.), Children's needs III: Development, prevention, and intervention (pp. 59−71). Washington, DC: National Association of School Psychologists.

Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development, 72,* 625-638.

Hartley, C. C. (2004). Severe domestic violence and child maltreatment: Considering child physical abuse, neglect, and failure to protect. *Children and Youth Services Review, 26,* 373-392.

Hawker, D. S. J., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Joumal of Child Psychology and Psychiatry and Allied Disciplines, 41,* 441-455.

Heise, L., & Garcia-Moreno, C. (2002). Violence by intimate partners. In E. G. Krug, L. L. Dahlberg, J. A. Mercy, A. B. Zwi, & R. Lozano (Eds.), World health report on violence and health (pp. 149−181). Geneva, Switzerland: World Health Organization.

Hershkowitz, I. (2011). The effects of abuse history on sexually intrusive behavior by

children: An analysis of child justice records. *Child Abuse & Neglect, 35,* 40-49.

Heyman, R. E., & Sleps, A. M. S. (2002). Do child abuse and interparental violence
lead to adulthood family violence? *Journal of Marriage and Family, 64*, 864-
870.

Hill, J. (2002). Biological, psychological, and social processes in the conduct disorders.
*Journal of Child and Adolescent Psychology and Psychiatry, 43,* 133-164.

Holt, M. K., Finkelhor, D., & Kantor, G. K. (2007). Hidden forms of victimization in
elementary students involved in bullying. *School Psychology Review*, *36*(3),
345–360.

Howes, C., Hamilton, C. E., & Matheson, C.C. (1994). Children's relationships with
peers: Differential associations with aspects of the teacher-child relationship.
*Child Development, 65,* 253–263.

Howes, C., & Hamilton, C. E. (1993). The changing experience of child care: Changes
in teachers and in teacher-child relationships and children's social competence
with peers. *Early Childhood Research Quarterly, 8,* 15-32.

Hu & Bentler (1999). Cutoff criteria for fit indexes in covariance structure analysis:
conventional criteria versus new alternatives, *Structural Equation Modeling, 6,*
1-55.

Hughes, J. (2011). Longitudinal effects of teacher and student perceptions of teacher
student relationship qualities on academic adjustment. *Elementary School
Journal, 112,* 38-60.

Hughes, J. N., Cavell, T. A., & Jackson, T. (1999). Influence of teacher-student

relationship on childhood conduct problems: A prospective study. *Journal of Clinical Child Psychology, 28,* 173-184.

Hughes, J. N., Cavell, T. A., & Willson, V. (2001). Further support for the developmental significance of the quality of the teacher-student relationship. *Journal of School Psychology, 39,* 289–302.

Ibabe, I., & Jaureguizar, J. (2010). Child-to-parent violence: Profile of abusive adolescents and their families. *Journal of Criminal Justice, 38,* 616-624.

Ibanez, E. S., Borrego, J., Pemberton, J. R., Terao, S. (2006). Cultural factors in decision-making about child physical abuse: Identifying reporter characteristics influencing reporting tendencies, *Child Abuse & Neglect, 30,* 1365-1379.

Jaffee, S. R., Caspi, A., Moffitt, T. E., & Taylor, A. (2004). Physical maltreatment victim to antisocial child: Evidence of an environmentally mediated process. *Journal of Abnormal Psychology, 113,* 44-55. doi: 10.1037/0021-843X.113.1.44

Jerome, E. M., Hamre, B. K., & Pianta, R. C. (2008). Teacher-child relationships from kindergarten to sixth grade: Early childhood predictors of teacher perceived conflict and closeness. Social Development, 18, 915–945.

Kerley, K. R., Xu, X., Sirisunyaluck, B., & Alley, J. M. (2010). Exposure to family violence in childhood and intimate partner perpetration or victimization in adulthood: Exploring intergenerational transmission in urban Thailand. *Journal of Family Violence, 25,* 337-347. doi: 10.1007/s10896-009-9295-7

Krahe, B., Scheinberger-Olwig, R., Waizenhofer, E., & Koplin, S. (1999). Childhood

sexual abuse and revictimization in adolescence. *Child Abuse & Neglect, 23,* 382-394.

Krug, E. G., Dahlberg, L. L., Mercy, J. A., Zwi, A. B., & Lozano, R. (2002). *World report on violence and health*. Geneva, World Health Organization.

Lackey, C. (2003). Violent family heritage, the transition to adulthood, and later partner violence. *Journal of Family Issues, 24,* 74−98.

Ladd, G. W., & Burgess, K. B. (2001). Do relational risks and protective factors moderate the linkages between childhood aggression and early psychological and school adjustment? *Child Development, 72,* 1579-1601.

Lansford, J. E., Miller-Johnson, S., Berlin, L. J., Dodge, K. A., Bates, J. E., & Pettit, G. S. (2007). Early physical abuse and later violent delinquency: A prospective longitudinal study. *Child Maltreatment, 12,* 233-245. doi: 10.1177/1077559507301841

Lansford, J. E., Dodge, K. A., Pettit, G. S., Bates, J. E., Crozier, J., & Kaplow, J. (2002). Long term effects of early child physical maltreatment on psychological, behavioral, and academic problems in adolescence: A 12-year prospective study. *Archives of Pediatrics and Adolescent Medicine, 156,* 824-830.

Laporte, L., Jiang, D., Pepler, D. J., & Chamberland, C. (2011). The relationship between adolescents' experience of family violence and dating violence. *Youth & Society, 43,* 3-27. doi: 10.1177/0044118X09336631

Legislative Analysts Office. (1996). Child abuse and neglect in California. Retrieved February 1, 2008, from http://www.lao.ca.gov/1996/010596 child

abuse/cw11096toc.html.

Lisak, D. (1995). Integrating a critique of gender in the treatment of male survivors of

childhood abuse. *Psychotherapy, 32,* 258-269.

Loring, M. T. (1994). Emotional abuse. New York: Lexington.

Lynch, M., & Cicchetti, D. (1992). Maltreated children's reports of relatedness to their

teachers. In R. Pianta (Ed.), *Beyond the parent: The role of other adults in*

*children's lives* (pp. 81-107).  San Francisco: Jossey-Bass.

Main, M. (1996). Introduction to special section on attachment and psychopathology:

Overview of the field of attachment. *Journal of Consulting and Clinical*

*Psychology*, *64*, 237–243.

Maker, A. H., Kemmelmeier, M., & Peterson, C. (2001). Child sexual abuse, peer sexual

abuse, and sexual assault in adulthood: A multi-risk model of revictimization.

*Journal of Traumatic Stress, 14*(2), 351–368.

Malik, S., Sorenson, S. B., & Aneshensel, C. S. (1997). Community and dating violence

among adolescents: Perpetration and victimization. *Journal of Adolescent*

*Health*, *21*, 291–302.

Manly, J. T., Cicchetti, D., & Barnett, D. (1994). The impact of subtype, frequency,

severity, and chronicity of child maltreatment on social competence and behavior

problems. *Development and Psychopathology, 6,* 121-143.

Manly, J. T., Kim, J. E., Rogosch, F. A., & Cicchetti, D. (2001). Dimensions of child

maltreatment and children's adjustment: Contributions of developmental timing

and subtype. *Development and Psychopathology, 13,* 759-782.

Margolin, G., Gordis, E. B., Medina, A. M., & Olvier, P. (2003). The co-occurrence of husband to-wife aggression, family-of-origin aggression, and child abuse potential in a community sample. *Journal of Interpersonal Violence, 18,* 413-440. doi: 10.1177/0886260502250835

Marshall, L. L. (1994). Physical and psychological abuse. InW. R. Cupach & B. H. Spitzberg (Eds.), The dark side of interpersonal communication. NJ: Hillsdale. Bargaining. Englewood Cliffs, NJ: Prentice Hall.

Mashburn, A. J., Hamre, B. K., Downer, J. T., & Pianta, R. C. (2006). Teacher and classroom characteristics associated with teachers' ratings of prekindergartners' relationships and behaviors. Journal of Psychoeducational Assessment, 24, 367–380.

Maughan, A., & Cicchetti, D. (2002). Impact of child maltreatment and inter-adult violence on children's emotion regulation abilities and socio-emotional adjustment. *Child Development, 73,* 1525-1542.

Maxwell, C. D., & Maxwell, S. R. (2003). Experiencing and witnessing familial aggression and their relationships to physically aggressive behaviors among Filipino adolescents. *Journal of Interpersonal Violence, 18,* 1432-1451. doi: 10.1177/0886260503258034

McCrae, J. S. (2009). Emotional and behavioral problems reported in child welfare over 3 years. *Journal of Emotional and Behavioral Disorders, 17,* 17–28.

Meehan, B. T., Hughes, J. N., & Cavell, T. A. (2003). Teacher-student relationships as compensatory resources for aggressive children. *Child Development, 74,* 1145–1157.

Mennen, F. E., Kim, K., Sang, J., & Trickett, P. K. (2010). Child neglect: Definition and identification of youth's experiences in official reports of maltreatment. *Child Abuse & Neglect, 34,* 647-658.

Merrill, L. L., Newell, C. E., Thomsen, C., Gold, S. R., Milner, J. S., & Koss, M. P. (1999). Childhood abuse and sexual revictimization in a female Navy recruit sample. *Journal of Traumatic Stress, 12,* 211-225.

Mersky, J. P., & Topitzes, J. (2010). Comparing early adult outcomes of maltreated and non-maltreated children: A prospective longitudinal investigation. *Children and Youth Services Review, 32,* 1086-1096.

Mersky, J. P., & Reynolds, A. J. (2007). Child maltreatment and violent delinquency: Disentangling main effects and subgroup effects. *Child maltreatment, 12,* 246-258. doi: 10.1177/1077559507301842

Messman-Moore, T. L., Long, P. J., & Siegfried, N. J. (2000). The revictimization of child sexual abuse survivors: An examination of the adjustment of college women with child sexual abuse, adult sexual assault, and adult physical abuse. *Child Maltreatment, 5,* 18-27.

Mihalic, S. W., & Elliott, D. (1997). A social learning theory model of marital violence. *Journal of Family Violence, 12,* 21−46.

Miller, P. A., & Eisenberg, N. (1988). The relation of empathy to aggressive and externalizing/antisocial behavior. *Psychological Bulletin*, *103*, 324-344.

Minnesota Statutes Annotated. (1998). *§* 626.556, Subd. 2.

Mosher, D. L., & Tomkins, S. S. (1988). Scripting the macho man: Hypermasculine

socialization and enculturation. The *Journal of Sex Research, 25,* 60-84.

National Center on Child Abuse and Neglect (NCCAN). (1988). Study findings: Study of national incidence and prevalence of child abuse and neglect: 1988. Washington, DC: Department of Health and Human Sciences.

National Research Council. Understanding child abuse and neglect. Washington, DC: National Academy Press, 1993. New York Social Services Law. (2006). *§* 300, New York Statutes.

Noll, J. G., Horowitz, L. A., Bonanno, G. A., Trickett, P. K., & Putnam, F.W. (2003). Revictimization and self-harm in females who experienced childhood sexual abuse: Results from a prospective study. *Journal of Interpersonal Violence, 18*(12), 1452–1471. doi: 10.1177/0886260503258035

O'Connor, E. (2010). Teacher-child relationships as dynamic systems. Journal of School Psychology, 48, 187– 218. O'Connor, E., & McCartney, K. (2007). Examining teacher-child relationships and achievement as part of an ecological model of development. American Educational Research Journal, 44, 340–369.

O'Connor, E., & McCartney, K. (2007). Examining tea- cher-child relationships and achievement as part of an ecological model of development. American Educational Research Journal, 44, 340–369.

O'Keefe, M. (1998). Factors mediating the link between witnessing interparental violence and dating violence. *Journal of Family Violence*, *13*, 39–57.

O'Keefe, M. (1995). Predictors of child abuse in martially violent families. *Journal of Interpersonal Violence, 10,* 3-25. doi: 10.1177/088626095010001001

O'Leary, K. D. (1988). Physical aggression between spouses: a social learning theory

    perspective. In: VanHasselt V. B., Bellack A. S., Hersen M. (Eds.). *Handbook of*

    *family violence*. New York: Plenum Press.

O'Leary, K. D., & Slep, A. M. S. (2003). A dyadic longitudinal model of adolescent

    dating aggression. *Journal of Clinical Child and Adolescent Psychology, 32*(3),

    314–327.

Petrenko, C. L. M., Friend, A., Garrido, E. F., Taussig, H. N., & Culhane, S. E. (2012).

    Does subtype matter? Assessing the effects of maltreatment on functioning in

    preadolescent youth in out-of-home care. *Child Abuse & Neglect, 36,* 633-644.

Pianta, R. C. (1994). Patterns of relationships between children and kindergarten

    teachers. *Journal of School Psychology, 32,* 15-31.

Pianta, R. C., & Steinberg, M. S. (1992). Teacher-child relationships and the process of

    adjusting to school. *New Directions for Child Development, 57,* 61–80.

Prinzie, P., Onghena, P., & Hellinckx, W. (2006). A cohort-sequential multivariate latent

    growth curve analysis of normative CBCL aggressive and delinquent problem

    behavior: Associations with harsh discipline and gender. *International Journal of*

    *Behavioral Development, 30,* 444–459.

Riggs, D. S., O'Leary, K. D., & Breslin, F. C. (1990). Multiple correlates of physical

    aggression in dating couples. *Journal of Interpersonal Violence, 5,* 61-73.

Sameroff, A. J., & Fiese, B. H. (2000). Transactional regulation: The developmental

ecology of early intervention. In J. P. Schonkoff & S. J. Meisels (Eds.),

*Handbook of early childhood intervention* (Vol. 2, pp. 135–159). New York:

Cambridge University Press.

Sappington, A. A., Pharr, R., Tunstall, A., & Rickert, E. (1997). Relationships among

child abuse, date abuse, and psychological problems. *Journal of Clinical

Psychology*, *53*, 319–329.

Schewe, P., Riger, S., Howard, A., Staggs, S., & Mason, G. (2006). Factors associated

with domestic violence and sexual assault victimization. *Journal of Family

Violence, 21,* 469–475.

Schnurr, M. P. & Lohman, B. J. (2008). How much does school matter? An examination

of adolescent dating violence perpetration. *Journal of Youth Adolescence, 37,*

266-283. doi: 10.1007/s10964-007-9246-7

Schwartz, J. P., Hage, S. M., Bush, I., & Burns, L. K. (2006). Unhealthy parenting and

potential mediators as contributing factors to future intimate violence. *Trauma,

Violence, & Abuse, 7,* 206-221. doi: 10.1177/1524838006288932

Shaw, D. S., Gillion, M., Ingoldsby, E. M., & Nagin, D. S. (2003). Trajectories leading

to school-age conduct problems. *Developmental Psychology, 39,* 189-200.

Shen, A. C. T. (2009). Long-term effects of interpersonal violence and child physical

maltreatment experiences on PTSD and behavior problems: A national survey of

Taiwanese college students. *Child Abuse & Neglect, 33,* 148-160.

doi:10.1016/j.chiabu.2008.07.006

Shields, A., & Cicchetti, D. (1998). Reactive aggression among maltreated children: The

contributions of attention and emotion dysregulation. *Journal of Clinical Child Psychology, 27,* 381-395.

Silver, R. B., Measelle, J. R., Armstrong, J. M., & Essex, M. J. (2005). Trajectories of classroom externalizing behavior: Contributions of child characteristics, family characteristics, and the teacher-child relationship during the school transition. *Journal of School Psychology, 43,* 39–60. doi:10.1016/j.jsp.2004.11.003

Simons, L. G., Burt, C. H., & Simons, R. L. (2008). A test of explanations for the effect of harsh parenting on the perpetration of dating violence and sexual coercion among college males. *Violence and Victims, 23,* 66-82. doi: 10.1891/0886-6708.23.1.66

Smith, D. (2006). The relationship between emotional childhood maltreatment and bullying (Doctoral dissertation, NewYork University, 2006). *Dissertation abstracts international section A: Humanities and social sciences, 67*(2-A), 724.

Spilt, J. L., Hughes, J. N., Wu, J. Y., & Kwok, O. (2012). Dynamics of teacher-student relationships: Stability and change across elementary school and the influence on children's academic success. *Child Development, 83,* 1180-1195. PMC3399930

Stermac, L., Reist, D., Addison, M., & Millar, G. M. (2002). Childhood risk factors for women's sexual victimization. *Journal of Interpersonal Violence, 17*(6), 647–670.

Stewart, A., Livingston, M., & Dennison, S. (2008). Transitions and turning points: Examining the links between child maltreatment and juvenile offending. *Child Abuse and Neglect, 32,* 66.

Stith, S. M., Rosen, K. H., Middleton, K. A., Busch, A. L., Lundeberg, K., & Carlton, R. P. (2000). The intergenerational transmission of spouse abuse: A meta-analysis. *Journal of Marriage and the Family, 62,* 640–654.

Straus, M. A., & Smith, C. (1990). Family patterns and primary prevention of family violence. In M. A. Straus & R. J. Gelles (Eds.), *Physical violence in American families* (pp. 507–528). New Brunswick, NJ: Transaction.

Straus, M. A., Gelles, R. J., & Steinmetz, S. K. (1981). *Behind closed doors: Violence in the American family*. Garden City, New York: Anchor Books.

Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues, 17*(3), 283–316.

Swinford, S. P., DeMaris, A., Cernkovich, S. A., & Giordano, P. C. (2000). Harsh physical discipline in childhood and violence in later romantic involvements: The mediating role of problem behaviors. *Journal of Marriage and the Family, 62,* 508-519.

Thornberry, T. P., Freeman-Gallant, A., Lizotte, A. J., Krohn, M. D., & Smith, C. A. (2003). Linked lives: The intergenerational transmission of antisocial behavior. *Journal of. Abnormal Child Psychology*, *31*, 171–184.

Thornberry, T. P., Ireland, T. O., & Smith, C. A. (2001). The importance of timing: The varying impact of childhood and adolescent maltreatment on multiple problem outcomes. *Development and Psychopathology, 13,* 957-979.

Tjaden, P., & Thoennes, N. (2000). *Full report of the prevalence, incidence, and*

*consequences of violence against women* (NCJ 183781). Washington, DC: U.S. Department of Justice.

Turner, H. A., Finkelhor, D., & Ormrod, R. (2006). The effect of life-time victimization on the mental health of children and adolescents. *Social Science & Medicine, 62,* 13-27. doi:10.1016/j.socscimed.2005.05.030

Tyler, K. A., Hoyt, D. R., & Whitbeck, L. B. (2000). The effects of early sexual abuse on later sexual victimization among female homeless and runaway adolescents. *Journal of Interpersonal Violence, 15*(3), 235–250.

U.S. Department of Health and Human Services, Administration of Children, Youth and Families (2009). Child Maltreatment 2007. Washington, DC: US Government Printing Office.

U.S. Department of Health and Human Services, Administration on Children, Youth and Families (2003). Child Maltreatment 2001. Washington, DC: US Government Printing Office.

Vandenberg, B., & Marsh, U. (2009). Aggression in youths: Child abuse, gender, and SES. *North American Journal of Psychology, 11,* 437-442.

Vezina, J., & Hebert, M. (2007). Risk factors for victimization in romantic relationships of young women. *Trauma, Violence, & Abuse, 8,* 33-66.

Vondra, J. I., Shaw, D. S., Swearingen, L., Cohen, M., & Owens, E. B. (2001). Attachment stability and emotional and behavioral regulation from infancy to preschool age. *Development and Psychopathology, 13,* 13-33.

Walker, L. E. (2000). The battered woman syndrome. New York, NY: Springer.

Wareham, J., Boots, D. P., & Chavez, J. M. (2009). A test of social learning and
    intergenerational transmission among batterers. *Journal of Criminal Justice, 37,*
    163-173. doi:10.1016/j.jcrimjus.2009.02.011

Weaver, T. L., & Clum, G. A. (1996). Interpersonal violence: Expanding the search for
    long term sequale within a sample of battered women. *Journal of Traumatic
    Stress, 9,* 783-803.

Weisel, D. L. (2005). Analyzing repeat victimizations. In The Office of Community
    Oriented Policing Services (Ed.), *Problem oriented guides for police: Problem-
    solving tool series*. Washington, DC: U.S. Department of Justice.

Wekerle, C., Wolfe, D. A., Hawkins, D. L., Pittman, A. L., Glickman, A., & Lovald, B.
    E. (2001). Childhood maltreatment, post traumatic stress symptomatology, and
    adolescent dating violence: Considering the value of adolescent perceptions of
    abuse and trauma meditational model. *Development and Psychopathology, 13*,
    847-871.

Wekerle, C., Leung, E., Wall, A. M., MacMillan, H., Boyle, M., Trocme, N., &
    Waechter, R. (2009). The contribution of childhood emotional abuse to teen
    dating violence among child protective services-involved youth. *Child Abuse &
    Neglect, 33,* 45-58. doi:10.1016/j.chiabu.2008.12.006

Wenzel, S. L., Tucker, J. S., Elliott, M. N., Marshall, G. N., & Williamson, S. L. (2004).
    Physical violence against impoverished women: A longitudinal analysis of risk
    and protective factors. *Women's Health Issues, 14*, 144-154.

Widom, C. S., Schuck, A. M., & White, H. R. (2006). An examination of pathways from

childhood victimization to violence: The role of early aggression and problematic alcohol use. *Violence and Victims, 21,* 675-690.

Wolfe, D. A., Scott, K., Wekerle, C., & Pittman, A. L. (2001). Child maltreatment: Risk for adjustment problems and dating violence in adolescence. *Journal of the American Academy for Child and Adolescent Psychiatry, 40,* 282-289.

Wyatt, G., & Peters, S. (1986). Methodological considerations in research on the prevalence of child sexual abuse. *Child Abuse and Neglect, 10,* 241 – 251.