Associations of Child Aggression and Intimate Partner Violence with Social Development among Low SES, African- American Children

By

Kaitlyn Noele Rediger

MPH

Behavioral Sciences and Health Education

Rollins School of Public Health, Emory University

Distribution Agreement

In presenting this thesis or dissertation as a partial fulfillment of the requirements for an advanced degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis or dissertation in whole or in part in all forms of media, now or hereafter known, including display on the world wide web. I understand that I may select some access restrictions as part of the online submission of this thesis or dissertation. I retain all ownership rights to the copyright of the thesis or dissertation. I also retain the right to use in future works (such as articles or books) all or part of this thesis or dissertation.

Signature:

Kaitlyn Noele Rediger 4/17/2012

_____ _____

[Student's name typed] Date

Associations of Child Aggression and Intimate Partner Violence with Social Development among Low SES, African-American Children

By

Kaitlyn Noele Rediger

MPH

Behavioral Sciences and Health Education

Nancy Thompson

Committee Chair

Nadine Kaslow

Committee Member

Gina Wingood

Committee Member

Michael Windle

Department Chair

ACKNOWLEDGEMENT

I am whole heartily thankful to my supervisor, Dr. Nancy Thompson, whose encouragement, guidance and endless hours of support from the initial draft to the final product enabled me to develop a deep understanding and unique perspective of violence as a significant public health problem in our world today.

I would also like to thank Dr. Nadine Kaslow for providing me with the appropriate data to conduct my research study. Her tireless support was an essential element in my success.

Lastly, I offer my regards and blessings to my family and friends who supported me throughout the completion of my graduate thesis. Specifically, I would like to thank my husband, Andrew, for his patience and enduring support throughout the writing process.

Associations of Child Aggression and Intimate Partner Violence with Social Development among Low SES, African-American Children

By

Kaitlyn Noele Rediger

Bachelor of Science

Virginia Polytechnic Institute and State University

2008

Thesis Committee Chair: Nancy Thompson, MPH, PHD

An abstract of

A thesis submitted to the Faculty of the
Rollins School of Public Health of Emory University

in partial fulfillment of the requirements for the degree of
Master of Public Health
in Behavioral Sciences and Health Education

2012

Abstract

Violence is a major public health concern because it has a tremendous impact on the health and well-being of today's youth (CDC, 2010). Unfortunately, injuries and deaths resulting from youth violence comprise only part of a larger public health dilemma. On a more broad-based scale, violence can also affect the health of communities by increasing health care costs, decreasing property values, disrupting social services, and decreasing social capital (Ernst et al., 2008). Previous literature confirms the negative consequences that result for children who are physically and sexually abused. However, there is far less literature pertaining to the impact of directly witnessing domestic abuse, both verbal and physical, on children's social development and a gap in the literature on the impact of indirectly witnessing verbal and/or physical violence on the social development of children in vulnerable populations such as low-income, African American children.

This study investigated the effects of directly and indirectly witnessing violence (representing their social norm) on children's relationship functioning, specifically examining children's aggressive behavior among low-income African American children 8-12 years of age. In addition, the study included multiple informants (both mother and child report data). Understanding the effects of directly and indirectly witnessing violence on childhood development and the social problems associated with the exposure is an important foundation for the design of future programs to treat these children.

The findings that emerged from this study suggest that exposure to IPV (directly or indirectly) plays an integral role in predicting youth aggression in low-income African American youth. This indicates the need for greater emphasis on preventative, theory-driven, educational programs for children from violent homes.

Table of Contents

List of Figures and Tables

Chapter I. Introduction and Rationale

Violence is widespread in the United States and is the second leading cause of death for young people between the ages of 10 and 24 (Centers for Disease Control and Prevention, 2010). Violent acts appear to be occurring with greater frequency and severity in our society and exact a huge economic toll. *"The average annual financial costs of medical and mental health treatment, emergency response, productivity losses, and administration of health insurance and disability payments for the victims of violent crimes occurring from 1987 to 1990 were estimated at $34 billion, with lost quality of life costing another $145 billion"* (Mercy et al., 1993, pg. 5).

Youth are disproportionately represented among the perpetrators of violence. From 1980 to 1989 more than 48,000 people were murdered by youths ages twelve to twenty-four (Federal Bureau of Investigation 1980-1989). Additionally, youth face an extraordinarily high risk of death and injury from violence and the highest risk of nonfatal assault of any age group in our society (U.S. Department of Justice, 1991). Unfortunately, the average age of both perpetrators and victims of violence has been growing younger and younger in recent years (U.S. DOJ, Bureau of Justice Statistics, 1992).

Youth violence is comprised of a wide range of behaviors including bullying, slapping, hitting, robbery, and assault. In 2009, about 1 in 5 high school students reported being bullied on school property. Olweus (1993) explains that bullying is comprised of three important components: (1) aggressive behavior that involves unwanted, negative actions; (2) involves a pattern of behavior that is repeated over time; and (3) involves an imbalance of power or strength.

One factor that may contribute to youth aggression is family violence. Previous research has shown that children who are abused and/or directly witness violence in their home tend to be more violent themselves as they grow into adolescents (Ernst et al., 2007). Intimate partner

violence (IPV) is a form of family violence and occurs between two people in a close relationship and exists along a continuum from a single episode of violence to ongoing battering (CDC IPV fact sheet, 2011). IPV includes four different types of behavior: (1) physical violence, which is defined as one individual hurting or trying to hurt a partner by hitting, kicking, or applying any other form of physical force; (2) sexual violence, which is defined as one individual forcing a partner to take part in a sex act when the partner does not consent; (3) threats of physical or sexual violence, which include the use of words, gestures, weapons, or other means to communicate the intent to cause harm; and lastly, (4) emotional abuse, which occurs when an individual threatens a partner or his or her possessions or loved ones, or harms a partner's sense of self-worth.

Intimate partner violence is a significant public health problem today, affecting 4.8 million women and 2.9 million men each year (Tjaden & Thoennes, 2000). In 2007 alone, IPV resulted in 2,340 deaths, 70% of which were females (Bureau of Justice Statistics, 2011). Additionally, IPV creates a great economic burden, with the medical care, mental health services, and lost productivity costing 8.3 billion dollars *(2003 dollars)* in 1995 (CDC, 2003; Max et al., 2004).

Physical violence by an intimate partner is associated with a variety of adverse health outcomes (Breiding, Black, & Ryan, 2008). Victims of physical violence often report negative health conditions that are the direct result of a violent act such as broken bones, bruising, headaches, etc.; however, studies have also shown a direct impact of IPV on the endocrine and immune systems, resulting in illnesses such as fibromyalgia, irritable bowel syndrome, gynecological disorders, pregnancy difficulties, sexually transmitted diseases, central nervous systems disorders, gastrointestinal disorders, and heart conditions (Crofford, 2007; Leserman & Drossman, 2007). In addition to physical ailments, victims of IPV frequently suffer psychological consequences including: depression, antisocial behavior, suicidal behavior, anxiety, sleep disturbances, emotional

detachment, low self-esteem, fear of intimacy, and symptoms of post-traumatic stress disorder (Bergen, 1996; Coker et al., 2002; Heise & Garcia-Moreno, 2002; Roberts, Klein, & Fisher, 2003).

Lastly, intimate partner abuse is associated with numerous negative health behaviors. Research has shown that the more severe the violence, the stronger its relationship to negative health behaviors of victims. These risky behaviors can include: engaging in high-risk sexual behavior, having unprotected sex, having multiple sex partners, abusing drugs and alcohol, and having unhealthy diet-related behaviors. Women who have an extensive history of IPV are also more likely to engage in risky behaviors such as abusing alcohol and drugs and/or attempting suicide compared to women without a history of intimate partner violence (Heise & Garcia-Moreno, 2002; Plichta, 2004; Roberts, Klein, & Fisher, 2003; Silverman et al., 2001).

While there is an abundance of research examining the ill effects of intimate partner violence on female victims, there is limited literature pertaining to the social development of children who directly witness domestic violence in their home and a gap in the literature regarding the developmental consequences of children who indirectly witness (hear violent acts or a violent verbal exchange) violence in their home. Previous research attests to the negative consequences of childhood physical, sexual, and emotional abuse (Barnett, Miller-Perrin, & Perin, 2005), but far less attention has been paid to the impact of directly and indirectly witnessing intimate partner violence in one's home in vulnerable populations such as low-income, African American children.

Theoretical Framework

The Theory of Reasoned Action (TRA) and Theory of Planned Behavior (TPB) state that the most crucial determinant of behavior is *behavioral intention,* or the individual's perceived likelihood that he or she will perform the behavior. According to both theories, two direct determinants of individuals' behavioral intentions are: attitudes toward performing the behavior and the subjective norm they associate with the behavior (Montano & Kasprzyk, 2008).

One's *Subjective norm* is determined by one's normative beliefs, meaning whether important referent individuals approve or disapprove of performing the behavior; this is further weighted by one's motivation to comply with those referents (Montano & Kasprzyk, 2008). For example, an individual who believes that certain referents think he or she should perform a behavior and is motivated to meet the expectations of those referents will hold a positive subjective norm. Conversely, an individual who believes these referents think he or she should not perform the behavior and wishes to comply with them will have a negative subjective norm. According to the TRA and TBP, social norms lead to intention and intention to behavior, therefore, social norms lead to behavior. A person's normative beliefs about whether each referent thinks he or she should perform the behavior directly relate to the person's decision to participate in the behavior.

Children who grow up in a violent home see violence as more normative and as a more acceptable means of handling a problem. Understanding the individual beliefs and social influences that underlie a child's decision to act out aggressively in his or her interpersonal interactions puts us one step closer, according to the TRA and TPB, to understanding how to reduce youth violence and break the cycle of family violence.

Purpose of the Study

Previous literature confirms the negative consequences that result for children who are physically and sexually abused. Unfortunately, as earlier noted, there is far less literature pertaining to the impact of directly witnessing domestic abuse, both verbal and physical, on children's social development and a gap in the literature on the impact of indirectly witnessing verbal and/or physical violence on the social development of children in vulnerable populations such as low-income, African American children.

This study investigated the effects of directly and indirectly witnessing violence (representing their social norm) on children's relationship functioning, specifically examining children's aggressive behavior among low-income African American children 8-12 years of age. While a great deal of research has been conducted examining risk and protective factors associated with low income children's behavior problems, this study is unique in that it looks specifically at the risk factor of directly or indirectly witnessing violence in their homes and its effect upon youth aggressive behavior. In addition, the study included multiple informants (both mother and child report data) and focused attention on witnessing violence. Understanding the effects of witnessing violence on childhood development and the social problems associated with witnessing violence is an important foundation for the design of future programs to treat these children.

The purpose of this study was, first, to define what constitutes being a witness to violence and, then, to determine if there is an association between directly and indirectly witnessing violence at home and increased aggressive interpersonal interactions. The overarching research question is: What are the effects of witnessing verbal aggression and intimate partner violence on the social development of low SES, African-American children? Specific questions include:

- Do children who directly and indirectly witness verbal aggression and physical violence among adults exert more self-reported aggression in their interactions with others?
- Do children who directly and indirectly witness verbal aggression and physical violence among adults exert more parental-reported aggression in their interactions with others?
- Is there a difference in reported aggression (self or parent reported) between children who directly witness violence among adults compared to children who are indirectly exposed to violence (hear violence but cannot see the violence acts)?

Chapter two: Literature review

Both the Centers for Disease Control and Prevention (CDC) and the National Center for Injury Prevention and Control (NCIPC) report that violence is a major public health concern because it has a tremendous impact on the health and well-being of today's youth (CDC, 2010). The CDC states that *"violence as a public health issue complements the more traditional status of the problem as a criminal justice concern and incorporates the social and developmental sciences"* (CDC, 2010, pg. 1-2). Sadly, injuries and deaths resulting from youth violence comprise only part of a larger public health dilemma. On a more broad-based scale, violence can also affect the health of communities by increasing health care costs, decreasing property values, disrupting social services, and decreasing social capital (Ernst et al., 2008). Previous research has shown that children who are abused tend to be more violent themselves as they age (Ernst et al., 2008). Additionally, children who *directly* witness domestic violence also show more behavioral problems or aggressive and antisocial behaviors (Duncan *et al.* 2005; Eiden 1999; McFarlane *et al.* 2003).

While violence remains a public health concern, violent crimes among youth and adults have reached the lowest point in decades in the United States, as well as in most other industrialized nations (Bureau of Justice Statistics, 2006; Federal Interagency Forum on Child and Family Statistics, 2008; van Dijk, van Kesteren, & Smit, 2007). Incarceration of youths for serious crimes has declined since the early 1990s (Bureau of Justice Statistics, 2006). However, despite the decline in incarceration rates, youth violence can still have a significant negative impact on both perpetrators and their victims, including negatively influencing a child's perceptions of school, academics, and social activities and worsening behavior and conduct problems (DeVoe et al. 2005; Haynie, 2001; Nansel, 2001; Smith & Sharp, 1994)

Youth Violence, Early Aggression, and Social Development

A child's social development is rooted in early opportunities, skills, and recognition which form through the early interactions with family, friends, teachers, neighbors, ministers, coaches, etc (Catalano and Hawkins, 1996). Successful experiences and interactions with family members and peers are associated with positive opportunities for social participation and the development of social and cognitive skills. If for any reason (poor social or economic conditions) children lack opportunities for and role models of positive social participation, they may be at a disadvantage in developing the essential skills that will promote success in school, work and other settings (Fraser, 1996). In this perspective, youth violence and aggression are seen as resulting factors of *"an impoverished opportunity structure, inadequate training in critical social and cognitive skills, the perception that there is social and concrete utility in aggressive behavior, and the lack of indigenous rewards for prosocial activities in the social environment"* (Fraser, 1996, pg. 349).

The formal definition of youth violence encompasses numerous behaviors ranging from homicide to bullying (Dahlburg, 1998). Youth violence can also include acts such as aggravated assault, harassment, intimidation, sexual assault, stalking, burglary, theft, and robbery (Herrenkohl, 2000). The specific factors which have contributed to the steady decline in youth violence since the early 1990s are not yet well understood, further highlighting the need to better understand the root causes of violence among youth. Previous research has debated several potential casual factors associated with youth violence and aggression including peer delinquency, family violence, and depression (Beaver et al., 2009; Park et al., 2006; Sprott, Doob & Jenkins, 2001). Additionally, neighborhood characteristics and urban design such as

community disorganization including the number of neighborhood gangs have been studied, as well as biologic and psychological characteristics of youth (Borum, 2000).

Research by Ferguson et al. (2009) found that depressed mood and delinquent peer groups and associations were the most consistent and strongest predictors of youth violence and aggression. Additionally, although more weakly associated, negative relations with adults, parental/guardian use of psychological abuse in romantic relationships and antisocial personality traits were also found to be predictors of aggressive and violent behavior (Ferguson et al, 2009).

Previous research indicates that one consequence of directly witnessing violence may be the attitudes a child develops regarding the use of violence as a form of conflict resolution (Edleson, 1999). Jaffe, Wilson and Wolfe (1986) suggest that children's direct exposure to IPV may generate attitudes justifying their own use of violence in their interactions with peers. Spaccarelli, Coatsworth and Bowden's (1995) research found that young men, directly exposed to family violence at a young age, believed that aggression enhanced their reputation and self image. The research findings show youth aggression (as a means to enhance one's reputation) significantly predicts violent offending. The findings support the association between IPV and youth aggression by showing that adolescent boys incarcerated for violent crimes who had directly witnessed violence in their home believed more than others that *"acting aggressively enhanced one's reputation or self-image"* (p. 173)

Etiology of Youth Violence

Research throughout the past forty years has examined the etiology of problem behavior and aggression in childhood and adolescence frequently focusing on the role of the family in the development of antisocial behavior (Griffin et al., 2000). Numerous findings have demonstrated that problems at home are regularly associated with problems outside of the home; specifically poor parent-child communication and poor parental support are commonly associated with greater youth substance use (Griffin et al., 2000). Furthermore, studies have demonstrated that parenting variables such as poor discipline practices play an integral role in the development of adolescent antisocial behavior (Griffin et al., 2000).

Intimate partner violence and its affect on youth violence and aggression

Many people today argue that violence in the home—at least to the degree it is detected today—is a new phenomenon. However, violence between intimate partners has been part of family life for centuries. Family violence has been recorded in religious and historical documents, dating back to the Roman Empire (Davidson, 1977; Dobash & Dobash, 1979). For the past several decades, theorists, clinicians, and policymakers have displayed growing concern that children who directly witness violence between intimate partners in their home may experience negative consequences even if they are not the intended target of the violence and are not physically hurt (Osofsky, 1999).

Previous research on family violence has examined the effects of violence on the direct victim of the abuse and the attacker; however children who directly witness violence between adults in their homes are only recently defined as victims. As Edleson (1999) notes *"these children have been called the silent, forgotten, and unintended victims of adult-to-adult domestic violence"* (p. 1). Findings from case studies dating back to the 1980's have led researchers to

consider direct exposure to domestic violence to be a form of psychological maltreatment because the direct witnessing of marital violence can significantly disrupt child development and socialization (McGee & Wolfe, 1991; Peled & Davis, 1995; Somer & Braunstein, 1999).

Over the past several years, researchers have examined the effects of directly witnessing violence on child development. Empirical reviews of this research have indicated that children's direct exposure to IPV is associated with a wide range of psychological, emotional, behavioral, social, and academic problems (e.g., Fantuzzo & Lindquist, 1989; Jaffe, Wolfe, & Wilson, 1990; Kolbo, Blakely, & Engleman, 1996; Margolin & Gordis, 2000; Wolak & Finkelhor, 1998). Additionally, counter to popular belief, records from social service and governmental agencies provide evidence that violence has long occurred at similar levels to that measured today and, furthermore, that children are frequently present during these violent incidents (Edleson 1999, Gordon, 1988; Peterson, 1991; Pleck, 1987).

Compared to the general population, families with documented incidents of IPV have a significantly higher number of children in the home (Fantuzzo et al., 1997). Additional research shows that physical violence is most common early in one's marital relationship, when children tend to be young (O'Leary et al., 1989). Still other research suggests that children in violent homes commonly see, hear, and intervene in episodes of marital violence, despite their parents' best efforts to keep their disputes private (Fantuzzo et al., 1997; Holden & Ritchie, 1991; Rosenberg, 1987).

Dube et al. (2002) found that adults who directly witnessed IPV as children had a higher risk for alcoholism, drug use, and depression as adults. According to Edleson (1999), *"directly witnessing a violent event is most commonly defined as being within visual range of the violence*

and seeing it occur" (Edleson, 1999, p. 2). Research by Pynoos and Eth (1984) of children who witnessed the murder of a parent supported Edleson's definition of directly witnessing violence. Pynoos and Eth suggested that *"at the core of the trauma for the child witness to homicide is a continued intrusion into the child's mind of the central action when lethal physical harm was inflicted: the final blow with a fist, the plunge of a knife, or the blast of a shotgun"* (Pynoos & Eth, 1984, p. 91).

Malmquist (1986) explained that witnessing the death of a parent can occur in a variety of ways. The child can be physically present for the attack or can be in the immediate vicinity of the event. In his 1980 quantitative study of sixteen young children between the age of 5 to 10 years old who were present during an act of familicide in which a family member attempted to kill all the members of the family (six of the children separately witnessed a parental murder), Malmquist found that, while each child fit the minimal DSM-III criteria for posttraumatic stress disorder, a significant amount of resilience was witnessed in their adaptations. Despite the presence of anxiety, anger and the recollection of vivid memories of the event, the children did not fall into psychotic states. Malmquist credits their resilience to the strength of their *"antecedent object relations and self-esteem which allowed them to handle such a traumatic event and loss without a massive abandonment of ego functioning and defenses"* (Malmquist, 1986, p. 325). Regardless, Malmquist insisted that it is imperative for children to receive psychiatric attention immediately after directly witnessing such a traumatic event. Unfortunately, most of the cases involving child witnesses seem to have had minimal or no psychiatric intervention prior to the raising of legal issues (Malmquist, 1986).

Research by Ernst et al. (2008) found that 76% of households where IPV occurred included children; additionally, one third of these children also are victims of IPV. Even more

alarming is the fact that the 2008 study found that the perpetrators were frequently victims and direct witnesses of domestic violence when they were children (Ernst et al., 2008). This finding presents an alarming public health problem in that a history of childhood IPV is common among perpetrators of IPV.

Witnessing violence during childhood

There has been a significant amount of research examining the negative effects of childhood abuse; however, there has been less research on the ill effects of directly witnessing marital violence as a child (Fantuzzo, Boruch, Beriama, Atkins, & Marcus, 1997). Despite limited research on directly witnessing violence during childhood, one-third of American children are estimated to have witnessed intimate partner violence (IPV) in their homes (Straus, 1992). In the United States, it is estimated that approximately 10 million children witness domestic violence (Maxwell &Maxwell 2003; McFarlane *et al.* 2003; Sullivan *et al.*, 2004).

Research has shown that domestic violence not only threatens the physical health and psychological well-being of women, but it also threatens the well-being of children living in the violent home. Reviews of previous research examining the impacts of IPV on children have shown that direct exposure to IPV has a significantly negative effect on children's functioning (Edelson, 1999; Fantuzzo & Mohr, 1999; Margolin & Gordis, 2000). Children directly exposed to violence in their home display symptoms of depression, as well as exhibit problems with social, school, and cognitive functioning.

Children who have directly witnessed domestic violence have been found to be fearful and withdrawn as well as overly anxious and display more depressive symptoms compared to children who do not witness domestic violence (Adams, 2006; Edleson, 1999; Maxwell & Maxwell, 2003; Zinc & Jacobson, 2003). Research has presented various explanations as to why

children of battered women display psychological problems. The first possible explanation is that directly witnessing family violence is traumatic in general and, thus, children who witness life-threatening violence between adults are more likely to exhibit signs of posttraumatic stress (Pynoos & Eth, 1985). A second explanation is that children of battered women may experience psychological problems because there is a higher probability that they themselves are abused.

A third explanation questions the capability of a mother experiencing IPV to care for her children. According to Hughs (1982) domestic violence is associated with severe psychological consequences and therefore renders the mother incapable in responding to her child's needs. Hughs reported that mothers may be less able to care for the emotional needs of their children when they are victims of physical violence and psychological abuse and therefore women with traumatic histories may exhibit impaired parenting skills. This explanation is further supported by research from Resnick and Aciemo (1997), who found that a history of IPV is associated with various psychological disorders that may interfere with a mother's relationship with her child. Lastly, in a study of preschoolers living in neighborhoods with high rates of community violence, maternal distress mediated the relationship between child exposure to violence and child behavior problems (Linares et al., 2001). Linares et al.'s (2001) findings demonstrate that children's emotional and behavioral functioning is indirectly impacted by the direct affect of violence on mothers' abilities to adequately parent.

In their meta-analysis of 118 studies on the psychosocial outcomes of children directly exposed to domestic violence, Kitzmann et al. (2003) found that children who directly witnessed domestic violence had significantly worse outcomes relative to those who had not; furthermore, the psychosocial outcomes of children witnessing domestic violence were not significantly different from those of physically abused children.

Cassidy (1994) explained that a child's ability to regulate his/her emotions is learned through interactions with others and is dependent on the mother's ability to provide a functional, emotional-regulatory model. The mother-child bond is thought to be an instrument through which a child learns to self-soothe and, if this bond is disturbed due to the mother's psychological health, the child may lack the ability to regulate his/her emotions (Cassidy, 1994). Additionally, research has shown that women who are abused frequently display signs of posttraumatic stress disorder (PTSD). Chemtob and Carlson (2004) discovered that among mothers who had experienced domestic violence, those who exhibited signs of PTSD were more likely to be impulsive in their actions toward their children. A study of battered women and their preschool-aged children found that maternal PTSD mediated the relationship between maternal life stressors and child behavior problems (Lieberman, Van Horn, & Ozer, 2005).

In their 2008 study, Samuelson and Cashman interviewed 30 women who had experienced IPV in the past but had not been in a violent relationship for at least six months, and who had at least one child between the ages of 5 and 18 years with whom they lived. Results found that a mother's posttraumatic stress symptoms (PTSS) that resulted from her experiences with IPV predicted children's emotional functioning; however, interestingly, neither maltreatment nor extent of witnessing of violence predicted emotion regulation difficulties, thus indicating that a mother's PTSS plays a critical role in her child's emotional development (Samuelson & Cashman, 2008). PTSS may persist into adulthood (Von Steen, 1997) or, for younger children, may persist into later childhood or early adolescence (Becker & McCloskey, 2002). Children who directly witness violence in their homes can react by exhibiting trauma symptoms (Levendosky *et al.*, 2002), and may also display signs of behavioral or emotional disorders which are close to the criteria of post-traumatic stress disorder (Eiden 1999; Zuckerman *et al.* 1995).

McGee (1997) and Edleson (1999) clarify a common misconception that witnessing domestic violence does not necessarily mean being within visible range of the violence and seeing it occur. Many children describe traumatic events that they have heard but have not necessarily have seen. Additionally, children can indirectly witness domestic violence by seeing the physical outcomes of the violence and noticing the injury to their mother, broken objects in their home, or even their mother's depressive symptoms (McGee, 1997).

Child's age as a moderator of the degree of problems associated with witnessing IPV

A child's age has been found to moderate the degree of problems associated with witnessing domestic violence (Becker & McCloskey 2002; Edleson 1999; Maxwell & Maxwell 2003; Von Steen 1997), with the youngest children exhibiting more problems than older children (Edleson, 1999; Hornor, 2005; McFarlane *et al.,* 2003). Previous research shows that children 12 months of age through pre-school age experience the most physiological and psychological problems as a result of directly witnessing verbal violence between intimate partners (Von Steen, 1997). Infants living in violent homes have displayed sleeping and feeding disorders (Hornor, 2005; McFarlane *et al.,* 2003). Anxiety, fearfulness, and inhibited behaviors are typical responses of pre-school children who directly witness domestic violence. School-age children who directly witness violence in their home frequently show a change in their behaviors in the classroom, which can ultimately affect their overall academic performance (Hornor, 2005).

Child's sex as a moderator of the degree of problems associated with witnessing IPV

While age has been shown to moderate the degree of problems associated with witnessing domestic violence, sex has not proven to be a moderator; boys and girls who witness domestic violence are both negatively affected (Maxwell & Maxwell, 2003).

While both sexes are negatively affected, previous studies have been inconsistent about the differences in male and female behavior problems as a result of witnessing violence at home.

Previous studies (Von Steen 1997) show that as a result of directly witnessing domestic violence, boys tend to experience externalized behavior problems whereas girls experience internalized problems such as high levels of anxiety and depression. However, research by McFarlane *et al.* (2003) found girls between 12 and 18 years of age, living with their abused mothers, displayed higher levels of aggression and delinquency compared to girls who were not directly exposed to violence. This was further supported by Becker and McCloskey (2002), who found that girls from violent homes are at more risk for experiencing externalized problems throughout adolescence than girls who do not witness violence in their homes. Additional research examining the effects of adolescents living in violent homes reported that adolescent males experience sadness about the violence in their home, while female adolescents tend to feel anger about its occurrence (Cummings *et al.*, 1994).

Socio-economic status as a contributing factor to family violence

In their study of children in five major US cities investigating the prevalence and risk of domestic violence, Fantuzzo *et al.* (1997) found that the highest rates of domestic violence occurred in low-income families. Similarly, Meltzer *et al.* (2009) found that children from moderate means and hard-pressed families are more likely to witness domestic violence. In their cross-sectional study, Meltzer *et al.* (2009) examined the socio-demographic correlates of children directly witnessing domestic violence and its association with childhood mental disorders. Their findings revealed nine factors independently associated with a greater likelihood of a child directly witnessing domestic violence. These factors included: older age group, mixed ethnicity, physical disorder, numerous children in the family, divorced parents, living in rented accommodations, poor neighborhoods, the mother's emotional state, and family dysfunction. Furthermore, they discovered that directly witnessing severe domestic violence

roughly tripled the likelihood of children having conduct disorders. Additionally, research by Zuckerman *et al.* (1995) found that children were more likely to develop problems related to directly witnessing violence in their home if the violence was frequent.

Cyclical nature of IPV and aggression

In their 2008 retrospective study, Ernst et al. found that there were substantial numbers of child witnesses in homes to which police were called for IPV. The researchers urged early intervention because studies have shown that children who directly witness violence in their home are negatively affected and tend to be more violent themselves as they grow into adulthood (Ernst et al., 2008). Additionally, previous research by Kernic et al. (2003) has supported a similar finding, that children who are victims of family violence are more likely to demonstrate aggressive, delinquent behavior and are more likely to suffer from anxiety and depression than the normative population. Because research shows that directly experiencing violence during childhood appears to continue its perpetration, early intervention programs are vital for children and may help them see that there are other ways to solve problems than violence (Ernst et al., 2008). Research by Ponce *et al.* (2004) found that the views of self and others of adults who were abused as children remained distorted and, furthermore, that both males and females who had been abused were more likely to be accepting of violence and abuse when they reached adulthood.

Research has found that the risk factors for becoming a perpetrator of IPV include childhood abuse or having directly witnessed parental violence (Bensley et al., 2003; Herrenkohl et al., 2004). Furthermore, findings from Cunradi et al. (2002) showed that women who reported childhood abuse were five times more likely to have also experienced severe IPV. Additionally,

men who reported a history of childhood physical abuse were three times more likely to perpetrate severe IPV (Cunradi, Caetano, & Schafer, 2002).

As previously stated, children who directly witness IPV in their home are more likely to exhibit behavioral problems as they enter adolescence and adulthood. Women, who were victims of family violence as children, have been shown to display distress and conflict in their interpersonal relationships as adults. In a study of women with a history of IPV compared with those not abused, women who were maltreated as children had higher levels of psychopathology and of aggression in current adult relationships and, overall, functioned more poorly (Lang et al. 2004). Studies have also found that children who directly witness IPV are more likely to abuse alcohol and illegal drugs as adults, to be victims of violence as adults, and to abuse their partners, thus continuing the violent cycle (Desai et al, 2002; Dube et al., 2002; Ponce, Williams, &Allen, 2004). Thus, it is essential for children who witness violence in their homes to understand how to better solve familial problems, without resorting to violence, so that the cyclical nature of IPV can be broken.

The TRA and the TPB

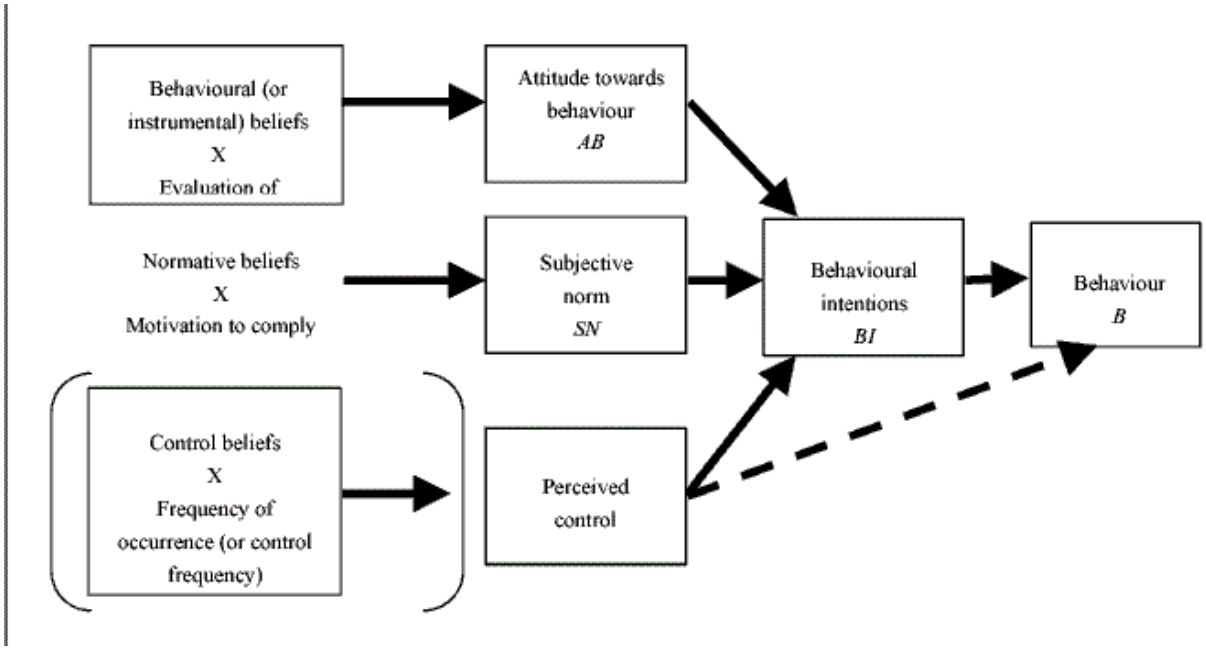
The Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB) highlight the theoretical constructs associated with individual motivational factors as determinants of the likelihood of performing a specific behavior (Montano & Kasprzyk, 2008). The TRA and TPB state that the most crucial determinant of behavior is *behavioral intention*, or the individual's perceived likelihood that he or she will perform the behavior. The direct determinants of individuals' behavioral intentions include: attitudes toward performing the behavior and the subjective norm they associate with the behavior (Montano & Kasprzyk, 2008).

Attitude is one of the two constructs of the TRA that predict one's intention to perform a behavior (Montano & Kasprzyk, 2008). Attitude is determined by the individual's beliefs about outcomes or attributes of performing the behavior, also known as behavioral beliefs. Furthermore, attitude is weighted by evaluations of those outcomes or attributes (Montano & Kasprzyk, 2008). An example is that someone who holds strong beliefs that a positively valued outcome, like personal power, will result from performing aggressive behavior will have a positive attitude toward aggressive behavior.

The second construct, *Subjective norm*, is determined by his or her normative beliefs, meaning whether important referent individuals approve or disapprove of performing the behavior; this is further weighted by his or her motivation to comply with those referents (Montano & Kasprzyk, 2008). For example, an individual who believes that his or her close friends think he or she should perform behave aggressively and who is motivated to meet expectations of those friends will hold a positive subjective norm for aggressive behavior. Conversely, an individual who believes these referents think he or she should not behave aggressively and wishes to comply with them will have a negative subjective norm for aggressive behavior.

In 1991, *perceived control* was added to the TRA by Ajzen and colleagues, changing the name to the Theory of Planned Behavior (TPB). In this theory, perceived behavioral control becomes the third construct in that is used to predict intention to perform a behavior. Perceived behavioral control is defined by control beliefs held by the individual regarding whether facilitators and barriers to performing a behavior do or do not exist. These beliefs are weighted by the amount of power or the impact the individual believes each control factor has to facilitate or inhibit the behavior (Montano & Kasprzyk, 2008). A diagram of the TPB is presented in Figure 1.

Figure 1.Theory of Reasoned Action & Theory of Planned Behavior



Chapter Three: Methodology

Participants

This study was part of a larger study of mother-child dyads in which many of the mothers from the sample (40%) experienced IPV (Kaslow & Thompson, 2008; Owen et al., 2008). Although the primary focus of this study is children, their mothers are also considered participants due to the inclusion of their report on their child's aggression. Thus, participants were African American women and their 8-12 year-old children (152 mother-child dyads met inclusion criteria). All mothers included in the sample were the legal guardians of their children. All children had lived with their mother a minimum of 50% of the time during the prior year and were living with their mother at the time of the assessment.

Of the 152 youth, 136 completed all of the data for the variables included in this study. Youth were comprised of 76 (56%) females, with an average age of 10.06 years (SD = .486 years). One-hundred-thirty-three (98.5%) of the 136 children self-reported as African-American/Black. In general, the children were from low-income families, with over half (n = 75; 56%) of the mothers reporting household incomes of less than 1,000 dollars a month. More than one-third (n = 43; 32%) of the youth reported being suspended from school at least once. Additionally, 19 (14%) of the youth were currently enrolled in special education classes. Mothers had a mean age of 32 and a mean education level of 11.88 years (SD = 1.86 years). Sixteen (12%) of the mothers reported that they were currently homeless.

Recruitment and Screening

The study was a secondary analysis of data drawn from a study funded by a grant from the Centers for Disease Control and Prevention/National Center for Injury Prevention and

Control (grant number #R49/CCR419767-0) entitled "Domestic Violence and Child Maltreatment in Black Families" that was awarded to Nadine Kaslow.

There were two phases of the screening of the study participants. In stage I, the following inclusion criteria were evaluated by the interviewer: 1) the potential mother participant must have been in a relationship in the past year, 2) the potential mother participant must have had an 8-12 year old child who lived with her at least 50% if the tune during the past year, and 3) the child must have been in contact with the mother's partner. If these criteria were met and the mother consented, she and her child were scheduled for a 2.5- to 3-hour interview. Phase II of the screening took place at the outset of the interview, when brief instruments were used to assess the eligibility of each woman and child. Dyads were excluded if either party were medically unstable or cognitively impaired, or if the mother exhibited significant psychotic symptoms.

Team members recruited participants by approaching African American and/or biracial women in multiple medical and emergency care clinics in the general hospital and in the associated children's hospital. Other recruitment efforts included community outreach to battered women's shelters and centers and health fairs in the community.

Mother-child dyads who met inclusion criteria participated in separate, concurrent assessments conducted by trained research team members. The assessments were administered verbally. Upon completion of the assessment, dyads were paid $50.00.

Description of Data Collection and Instruments

Measures

Demographic covariates: Demographic data for the mother and child participants were collected utilizing a comprehensive Demographic Data Sheet. The demographic variables included: mother and child's age (scored continuously), child's race (1=black, 2=biracial),

mother's race (0=not African American/Black, 1=African American), child's sex (0=male, 1=female), mother's current relationship status (1=single/never married, 2=partner, not living together, 3=partner living together, but not married, 4=married, 5=separated, 6=divorced, 7=widowed, 8=other), length of mother's current relationship (1=less than one week, 2=one week to one month, 3=less than one month to 6 months, 4=seven months to eleven months, 5= one year to five years and eleven months, 6=six years to ten years, 7=more than ten years), number of partners (scored continuously), number of abusive relationships (scored continuously), number of children (scored continuously), if mother considers herself homeless (0=no, 1=yes), mother's religion (1=Baptist, 2=Jehovah's Witness, 3=Catholic, 4=Holiness, 5=7th Day Adventist, 6=Muslim, 7=Methodist, 8=Christian/Non-denominational, 9=Other, 10=None), education level (scored continuously), if mother is currently employed (0=no, 1=yes), type of work (1=higher executives, major professionals, owners or larger business, 2=business manager, medium businesses, lesser professionals, 3=administrative personnel, small businesses, minor professionals, 4=clerical and sales, technician, little businesses, 5=skilled manual, 6=semiskilled, 7=unskilled), mother's current source of income (1=job, 2=TANF, 3=food stamps, social security/SSI/Disability, 5=partner, 6=child support, 7=parents, 8=family member-other than parent, 9=other), individual and monthly income (1=$0-249, 2=$250-499, 3=$500-999, 4=$1000-1,999, 5=$2000 +), mother's hospital history (0=no, 1=yes), mother and child's medical problems (0=no, 1=yes), mother and child's current medications (scored continuously), mother's previous involvement with the legal system (0=no, 1=yes), and incarceration history (0=no, 1=yes).

Aggressive Behavior: Aggressive behavior was assessed using two separate measures: the Child Behavior Checklist (CBCL) and the Youth Self Report (YSR). The CBCL

assesses the emotional and behavioral problems of children aged 4-16 according to *caregiver reports*. The reliability of the instrument ranges with alphas of .78 to .97. Additionally, the criterion validity was assessed and found to be acceptable (Violence Institute of New Jersey, 2006). The first section of the questionnaire consists of 20 competence items and the second section consists of 120 items on behavior or emotional problems during the past 6 months. For this investigation, only the CBCL Aggressive subscale was used to assess youth aggression according to reports from their mothers. Two versions of this instrument exist: one for children ages 1 1/2 - 5 and another for ages 6 - 18. Because all children in this study were at least 8 years of age, information below pertains to the CBCL for 6-18 year olds. The 140 questions take about 15 minutes on average to administer (Achenbach 1991). Responses to the Child Behavior Checklist (CBCL) variable are measured along a scale with a score of (0) indicating the child is "Okay," a score of (1) indicating the child is "borderline," and a score of (2) indicating the child is "clinical." This was treated as a continuous variable.

The YSR is a 112-item, self-report instrument on which youths rate the veracity of each item, "now or within the past 6 months." It provides self-ratings for 20 competence and problem items paralleling those of the CBCL/Ages 6-18. The children's' responses to the YSR questionnaire were measured along a scale. For this investigation, only the YSR Aggressive subscale was used to assess youth aggression according to self-reports. A score of (0) indicated the child was "Okay," a score of (1) indicated the child was "borderline," and a score of (2) indicated that the child was "clinical." The YSR also includes open-ended responses to items covering physical problems, concerns, and strengths. Youths rated how true each item was for themselves when they completed the instrument (i.e., now) or was within the past six months, using the same three-point response scale as the CBCL/6-18. The primary construct measured is

aggression (Achenbach 1991). This was treated as a continuous variable. The YSR is highly valid and reliable, based largely on the variety and strength of the reliability (Range: .89-.86) and criterion validity across many languages and cultural contexts (Center for Addiction and Mental Health, 2009).

Child Witnessing Measure (CWM): The Child Witnessing Measure was created by the research staff due to the other instruments' limited assessment of children who witness violence in their home. The CWM is comprised of 17 questions. Responses to the Child Witnessing Measure (CWM) questionnaire are measured along a scale with a (0) indicating "never," a (1) indicating "1-4 times," and a (2) indicating "5 or more times." Each question asks about violence witnessed in the home in the past year and prior to the past year. In the current sample, internal consistency reliability was alpha=.88. Construct validity was established between the CWM and Module E (Witnessing and Indirect Victimizations) of the Juvenile Victimization Questionnaire ($r = .617$, $p > .0001$), a similar child-report questionnaire. The CWM was treated as a continuous variable.

Statistical Analysis

Using the Statistical Package for the Social Sciences (SPSS), I first examined the composition of the sample, followed by the frequencies of the main variables: YSR aggressive behavior total score (mean=6.61, sd=5.08), CBCL aggressive behavior total score (mean=7.56, sd=6.556), and CWM (mean=2.412, sd=3.12). Secondly, I reviewed the descriptive information for items on the CWM. Two of the CWM variables (In the past year, I saw a grown-up in my home killed; In the past year, I saw a grown-up in my home force another grown-up to have sex or to touch their private parts) had variances equal to zero and were excluded from further

analysis. Additionally, a third CWM variable (In the past year, I saw a grown-up in my home being shot) was not significantly, statistically related to the other items in the measure and had a low variance, so it was excluded, as well. I then computed a new variable (CWM_total), which represented the sum of the remaining 14 of the 17 CWM variables. After analyzing the frequency of the new variable CWM total, I established its reliability (alpha=.88) and validity. Construct validity was established between the CWM and Module E (Witnessing and Indirect Victimizations) of the JVQ ($r = .617$, $p > .0001$). Then, I performed a multivariate correlation test comparing CWM total to both the YSR and CBCL variables, while controlling for age, gender, and SES, to determine if there was an association between directly and indirectly witnessing violence and youth aggression (both self-reported and parent-reported).

Lastly, I computed two new variables: CWM-direct and CWM-indirect. The CWM-direct variable was comprised of seven items representing youth directly witnessing violence among adults. These items include: In the past year, I saw a grown-up curse at another grown-up; In the past year, I saw a grown-up throw something at another grown-up; In the past year, I saw a grown-up being punched, etc... by another grown-up; In the past year, I saw a grown-up choke another grown-up; In the past year, I saw a grown-up hurt badly; In the past year, I saw a grown-up threaten another with knife; and In the past year, I saw a grown-up stabbed. The CWM-indirect was comprised of 5 items representing youth hearing adult violence but not directly witnessing it. These items include: In the past year, I heard grown-ups yelling at each other; In the past year, I heard a grown-up threaten to hit another grown-up; In the past year, I heard a grown-up punched, etc...by another grown-up; In the past year, I heard a grown-up threaten to kill another grown-up; In the past year, and I heard a grown-up threaten another if tried to tell. After analyzing the frequencies of both CWM-direct and CWM-indirect, I

established their reliability (alpha=.753 and alpha=.702 respectively) and validity. Construct validity was established between Module E of the JVQ and CWM-direct (r =.604, p >.0001) as well as between Module E of the JVQ and CWM-indirect (r=.541, p= >.0001). Finally, I performed a hierarchical linear regression test to determine if there was a difference between directly witnessing violence among adults and indirectly witnessing adult violence in predicting youth aggression levels (both self-reported and parental-reported). Of the 152 total mother-child dyads who met the inclusion criteria for the study and completed the demographic survey, 136 dyads completed the Child Witnessing Measure (mean=2.41, SD=3.12).

Chapter 4: Data Analysis and Findings

Results

Descriptive Statistics

Participants were African American women and their 8-12 year-old children (136 mother-child dyads). As presented in the descriptive data (Table 1), youth were comprised of

Table 1: Descriptive Data

Table 1 Background Data for Study Participants

Variable	Mean	frequency	SD	Percentage
Child				
Gender (female, %)	76			55.9
Race (Black/African American, %)		133		98.5
Mean age (in years)	10		.486	
Mean grade in school	4.47		1.55	
Ever suspended from school (%)		43		31.9
Ever received awards/honors from school (%)		126		93.3
Special education classes (%)		19		14.1
Medical problem (%)		34		25.2
Currently taking medication (%)		30		22.2
Mean number of siblings	3.37		2.46	
Mother				
Mean age (in years)	32.39		6.92	
Currently employed (%)		49		36.6
Monthly individual income (%)				
0-249		22		16.4
250-499		21		15.7
500-999		32		23.9
1,000-1,9999		30		22.4
>2,000		29		21.6
Mean years of education	11.88		1.86	
Mean number of children	3.37		1.84	
Mean number of people in household	4.86		2.14	
Currently homeless (%)		21		11.9
Ever incarcerated in jail or prison (%)		41		80.4

56% females (n=76) with an average age of 10 years (SD = .486 years). More than one-third (n = 43; 32%) of the youth reported being suspended from school at least once. Additionally, 19 (14%) of the youth were currently enrolled in special education classes. In general, the children were from low-income families, with over half (n=75; 56%) of the mothers reporting household incomes of less than $1,000 a month. One-hundred-thirty-three (98%) of the 136 children self-reported as African-American/Black. Mothers had a mean age of 32 and a mean education level of 11.88 years (SD = 1.86 years). Sixteen (12%) of the mothers reported that they were currently homeless.

Do children who directly and indirectly witness verbal aggression and physical violence among adults exert more self-reported aggression in their interactions with others?

A total of 136 children completed the Child Witnessing Measure questionnaire. To test hypothesis one, the variable YSR aggressive behavior total (mean=6.61, sd=5.08) and CWM total (mean=2.412, sd=3.12) were analyzed. A multivariate correlation test was used to assess the relationship between the total CWM and youths' self-reported aggression levels, while controlling for the child's age and sex. There was a statistically significant positive relationship between these two variables (r=.185, p=.032).

Do children who directly and indirectly witness verbal aggression and physical violence among adults exert more parental-reported aggression in their interactions with others?

To test hypothesis two, the variable CBC aggressive behavior total (mean=7.56, sd=6.56) and CWM total (mean=2.412, sd=3.12) were analyzed. A multivariate correlation test was used to assess the association between the total CWM and parental-reported youth aggression, while controlling for the mother's monthly reported household income. Results of the multivariate

correlation test indicated a statistically significant positive relationship between the two variables (r=.276, p=.001).

Is there a difference in reported aggression (self or parent reported) between children who directly witness violence among adults compared to children who indirectly witness violence (hear violence but cannot see the violent acts)?

Comparison between youth directly witnessing adult violence, indirectly witnessing adult violence, and youth self-reported aggression

To test hypothesis 3.a, the variable YSR aggressive behavior total was correlated with CWM-direct (mean=.993, sd=1.57), and CWM-indirect (mean=1.1, sd=1.44). To determine if there was a difference between directly witnessing violence among adults and indirectly witnessing adult violence in predicting youth self-reported aggression levels, I performed a hierarchical linear regression. The overall model was not significant (F (2,135)=2.678, p=.072). Among youth, there was no statistically significant association between directly or indirectly witnessing adult violence and self-reported aggression levels.

Comparison between youth directly witnessing adult violence, indirectly witnessing adult violence and parental-reported youth aggression

To test hypothesis 3.b, the variable CBCL aggressive behavior total was correlated with CWM-direct and CWM-indirect. To determine if there was a difference between directly witnessing violence among adults and indirectly witnessing adult violence in predicting parent-reported youth aggression levels, I performed a hierarchical linear regression. The overall model was significant (F (2,135)=5.034, p=.008), with 0.3% of the variance in CBCL aggressive

behavior uniquely explained by CWM-direct, 2.7% of the variance uniquely explained by CWM-indirect and 4.1% of the variance, the largest portion of explained variance, explained by shared variance. Therefore, what explains the greatest part of the aggressive behavior is not unique to either CWM-direct or CWM-indirect, but something common to both of them. Interestingly, although CWM-direct, did not make a significant unique contribution, CWM-indirect comes very close to making a significant unique contribution (p=.053).

Table.1 Results from Hierarchical Linear Regression Test

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B		Correlations		
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Zero-order	Partial	Part
1	(Constant)	6.510	.639		10.190	.000	5.247	7.774			
	CWM_direct	.856	.346	.209	2.478	.014	.173	1.539	.209	.209	.209
2	(Constant)	6.031	.679		8.888	.000	4.689	7.373			
	CWM_direct	.286	.450	.070	.635	.526	-.604	1.176	.209	.055	.053
	CWM_indirect	.968	.496	.214	1.949	.053	-.014	1.949	.260	.167	.163

Chapter 5: Conclusions, Implications, and Recommendations

The mother participants in this study reported relatively low incomes and high rates of unemployment and homelessness. Additionally, both the mothers and children manifested high levels of psychological distress. Previous research supports that there are severe psychological and emotional consequences for children who experience abuse (Owen et al., 2007). Several studies have looked at the negative effects of directly witnessing violence on the social and emotional development of children, however there is a gap in the literature with regards to indirectly witnessing physical and verbal violence and the effect it has on the interpersonal interactions of youth.

This study examined the level of aggression (self-reported and mother-reported) among low-income African American and biracial youth who had both seen (directly witnessed) and heard (indirectly witnessed) violence in their homes. Consistent with the literature, these findings show that there were significant correlations between both directly and indirectly witnessing violence at home and youth aggression levels, revealing that children who are exposed to more family violence display higher levels of aggression in their interactions with others. When comparing the contributions of direct to indirect exposure, the results show that indirect exposure made a greater contribution than did direct exposure to parental-reported youth aggression. In summary the findings support that together, directly and indirectly witnessing violence significantly predict higher levels of parental-reported aggression and additionally that indirect exposure to violence should be more heavily researched because it (independent from direct exposure) is clearly (although not significantly) associated with higher levels of youth aggression. Future research should explore if "seeing" an aggressive act makes the act in some way less appealing, and therefore detracting from the likelihood of a child modeling it in his/her

interpersonal interactions. In keeping with prior findings, this study shows that children's perceptions of violence can affect their social development by negatively impacting their personal interactions with others though heightening their aggression levels.

The findings show that witnessing violence was not significantly associated with the Youth Self Report when broken into its two components (direct and indirect); however it was significantly associated with the YSR when these two components were combined. This is more than likely due to an initial weak relationship between the two variables and could also be an issue of power when the second IV was added.

The results of this investigation need to be considered in light of several study limitations. To begin, while 152 mother-child dyads met inclusion criteria for this study, only 136 dyads had complete data for all of the variables included in this study. Secondly, although the focus on African American and biracial children strengthened the study, it also precluded the findings from being generalized to other groups of children. Additionally, there were several inclusion criteria, such as being between the age of 8 and 12 years and having to have had contact with the mother's partner, which resulted in a somewhat restricted sample.
This may have further limited the generalizability of the findings.

A fourth limitation is that both the CBCL and YSR rely on participant self-report, which may not accurately reflect the youth's behavior. For example, women in violent relationships may view aggression differently than other women.

A fifth limitation is that little information on the mothers' partners was collected and, therefore, the extent of contact that children had with their mothers' partners and the impact of that contact in unknown. This is not the only relevant variable that was not explored. Additional

research is needed to further investigate the role of other potential contributory variables in the IPV-child aggression link including child maltreatment, academic success, peer and social relations, and general life stressors. Further research examining these variables as potential pathways in the link between IPV and aggression could help identify the role of seeing and hearing violence in the context of other individual and societal variables.

Despite these limitations, there are a number of positive aspects of this study design. First, narrowing the focus to include only African-American or biracial participants is consistent with the request for a focus on a particular ethnic or cultural group (Elliot & Urquiza, 2006). Additionally, by assessing aggression levels using both mother-report and child-report data, I was able to gain a more accurate picture of indirect and direct violence exposure as a predictor of aggression in youth.

The data suggest that children who are indirectly and directly exposed to violence in their home act out more aggressively (aggression subscale) in their interactions with others as reported by their mothers and through self-report. Further examination of children's use of aggression as a form of conflict management could be helpful in understanding how their perceptions of conflict are guided by the violence they are exposed to at home. Additionally, future research could benefit from more attention to relevant cultural variables which may influence conflict styles and perceived social norms.

These findings have serious public health implications, specifically for positive youth development programs throughout the country. An extensive study by Catalano et al. (1999) examined the effects of seventy-seven positive youth development programs across the United States. The study revealed a shift in the way our country addresses youth issues seen with an

increase in major federal funding initiatives to address the rise in juvenile crime leading back to the 1950s. Catalano et al. explain,

> *"At first, interventions to support families and children were primarily responses to existing crises. Their focus was on reducing juvenile crime, or transforming poor character in youth. As the nation watched youth problems become more prevalent, intervention and treatment for a wide range of specific problems were developed. In the last three decades, both services and policies designed to reduce the problem behaviors of troubled youth have expanded*" (pg. 2).

The researchers' stress that youth programs that lack a theoretical framework and solely focus on correcting problem behaviors rather than preventing them will be unsuccessful.

A stronger, preventive, program approach is necessary to educate youth on the many predictors of aggression and violence and provide healthier, more positive solutions for managing conflict. The aforementioned Theory of Reasoned Action and Planned Behavior highlights the theoretical constructs associated with individual motivational factors as determinants of the likelihood of performing a specific behavior (Montano & Kasprzyk, 2008). The theory states that the most crucial determinant of behavior is *behavioral intention*, or the individual's perceived likelihood that he or she will perform the behavior.

Incorporating the Theory of Reasoned Action and Planned Behavior into a youth program would provide youth with the opportunity to see their aggressive behavior as both manageable and controllable. Teaching children who are directly and indirectly exposed to violence that personal power (a valued outcome) will not result from aggressive actions could change children's attitude toward aggressive behavior from positive to negative. Youth development programs that foster

healthy relationships among young people can incorporate the Theory of Reasoned Action and Planned Behavior to address subjective norms. Illustrating to youth who are routinely exposed to violence that their peers do not support aggressive behavior could motivate youth to meet the expectations of their friends and, thus, hold a negative subjective norm for aggressive behavior.

Positive youth development programs have a greater potential for success if they educate children on the many predictors of aggression and violence, in the hope of altering their attitudes toward and motivation for committing an aggressive or violent act. By changing children's attitudes towards aggressive behavior and empowering them through advancing their perceived behavioral control, youth programs can change poor behavior choices and alter children's intentions to commit the negative or harmful act.

In summary, the findings that emerged from this study suggest that exposure to IPV (directly or indirectly) plays an integral role in predicting youth aggression in low-income African American youth. This indicates a need for greater emphasis on preventive, theory-driven, educational programs for children from violent homes. These findings support that how children are exposed to violence (directly or indirectly) is irrelevant in that both means predict higher levels of aggression.

References

Adams, C. (2006) The consequence of witnessing family violence on children and implications for family counselors. *The Family Journal*, 14, 334–341.

Barnett, O., Miller-Perrin, C. L., & Perrin, R. D. (2005). *Family violence across the lifespan: An introduction* (2nd ed.). Thousand Oaks, CA: Sage.

Becker, K. & McCloskey, L. (2002) Attention and conduct problems in children exposed to family violence. *American Journal of Orthopsychiatry*, 72, 83–91.

Bensley L, Van Eenwyk J, Wynkoop Simmons KW. (2003) Childhood family violence history and women's risk for intimate partner violence and poor health. *Am J Prev Med*. 25:38–44.

Beaver KM, Shutt JE, Boutwell BB, Ratchford M, Roberts K, Barnes JC. (2009) Genetic and environmental influences on levels of self-control and delinquent peer affiliation: results from a longitudinal sample of adolescent twins. *Criminal Justice and Behavior* 36:41-60.

Bergen, R. K. (1996). *Wife rape: Understanding the response of survivors and service providers.* Thousand Oaks, CA: Sage.

Borum R. (2000) Assessing violence risk among youth. *J Clin Psychol* 56: 1263-88.

Breiding, M. J., Black, M. C., & Ryan, G. W. (2008). Chronic disease and health risk behaviors

associated with intimate partner violence—18 U.S. States/Territories, 2005. *Annals of Epidemiology, 18*, 538–544.

Bureau of Justice Statistics. Crime and victims statistics. 2006. Available at: http://www.ojp.usdoj.gov/bjs/cvict.htm

Bureau of Justice Statistics. Indicators of school crime and safety. 2007. Available at http://www.ojp.usdoj.gov/bjs/pub/pdf/iscs07.pdf

Cassidy, J. (1994) Emotion Regulation: Influences of attachment relationships. *Monographs of the Society for Research in Child Development*, 59

Catalano, R. E., Berglund, M. L., Ryan, J. A., Lonczak, H.S., and Hawkins, J. D. (1999) Research Findings on Evaluations of Positive Youth Development Programs. Seattle, Washington.

Catalano, R. F., & Hawkins, J. D. (1996). The Social Development Model: A Theory of Antisocial Behavior. In J.D. Hawkins (Ed.), Delinquincy and Crime: Current Theories (pp. 149-197). New York: Cambridge University Press.

Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS) [online]. (2010) [cited 2010 June 14]. Available from: URL: www.cdc.gov/injury/wisqars/index.html

Chemtob CM, Carlson JG. (2004) Psychological effects of domestic violence on children and mothers. *International Journal of Stress Management*. 11:209–226.

Coker, A. L., Smith, P. H., Thompson, M.P., McKeown, R., Bethea, L., Davis, K. E. (2002) Social Support Protects against the Negative Effects of Partner Violence on Mental Health. *Journal of Women's Health and Gender-Based Medicine* 11(5) pp. 465-476

Crofford, Leslie (2007) Violence, Stress, and Somatic Syndromes, *Trauma Violence Abuse*, 8 (3) pp. 299-313

Cummings JL, Mega M, Gray K, Rosenberg-Thompson S, Carusi, DA, Gornbein J. (2004) The Neuropsychiatric Inventory: comprehensive assessment of psychopathology in dementia. Neurology 44: in 2308–14.

Cunradi CB, Caetano R, Schafer J. (2002) Alcohol related problems, drug use and male intimate partner violenceseverity among US couples. *Alcohol Clin Exp Res*. 26:293–500

Dahlburg L. (1998) Youth violence in the United States: Major trends, risk factors, and prevention approaches. *Am J Prev Med* 14:259-72.

Davidson, T. (1977). Wifebeating: A recurring phenomenon throughout history. In Maria Roy (Ed.) Battered women (pp. 2-23). New York: Van Nostrand Reinhold.

Department of Justice, *Age-Specific Arrest Rates and Race-Specific Arrest Rates for Selected Offenses, 1965-1988;* and U.S. Department of Justice, *Criminal Victimization in the United States:1973-90 Trends,* Pub. no. NCJ-139564 (Washington: U.S. Department of Justice, Bureau of Justice Statistics, 1992).

Department of Justice, Criminal Victimization in the United States, 1991

Desai S, Arias I, Thompson MP, Basile KC. (2002) Childhood victimization and subsequent adult revictimization in a nationally representative sample of women and men. *Violence Vict.*17:639–53.

DeVoe E, Dean K, Traube D, McKay M. (2005) The SURVIVE community project: a family-based intervention to reduce the impact of violence exposures in urban youth. *J Aggression Maltreat Trauma* 11:95-116.

Dobash, R. Emerson, and Russell P. Dobash (1979) Violence against Wives: A Case against the Patriarchy. New York: Free Press

Dube SR, Anda RF, Felitti VJ, et al. (2002) Exposure to abuse, neglect, and household dysfunction among adults who witnessed IPV as children: implications for health and social services. *Violence Vict.*17:3–13

Duncan, A., Thomas, J. & Miller, C. (2005) Significance of family risk factors in development of childhood animal cruelty in adolescent boys with conduct problems. *Journal of Family Violence*, 20, 235–239.

Edleson, J. (1999) Children's witnessing of adult domestic violence.*Journal of Interpersonal Violence,* 14**,** 839–870

Eiden, R. (1999) Exposure to violence and behavior problems during early childhood. *Journal of Interpersonal Violence*, 14, 1299–1312.

Ernst, A. A., Weiss, S. J., Castillo, C.D., Aagaard, J., Marvez-Valls, E., D'Angelo, J (2007) Witnessing Intimate Partner Violence as a Child Does Not Increase the Likelihood of Becoming an Adult Intimate Partner Violence Victim. Society for Academic Emergency Medicine 14(5) pp. 411-418

Ernst, A., Weiss S. J., Enright-Smith, S., Hansen, J. P. (2008) Positive Outcomes from an immediate and ongoing intervention for child witnesses of intimate partner violence. American *Journal of Emergency Medicine* 26 pp 389-394.

Fantuzzo, J. W., Boruch, R., Beriama, A., Atkins, M., & Marcus, S. (1997). Domestic violence and children: Prevalence and risk in five major U.S. cities. *Journal of the American Academy of Child and Adolescent Psychiatry, 36,* 116–122.

Federal Bureau of Investigation, Supplemental Homicide Report Data Reports, 1980- 1989

Fantuzzo, J., & Mohr,W. K. (1999). Prevalence and effects of child exposure to domestic violence. *The Future of Children*, *9,* 21– 32.

Frazer, Mark (1996) Aggressive Behavior in Childhood and Early Adolescence. *Journal of Social Work* 41(4) 347-361.

Federal Interagency Forum on Child and Family Statistics. America's children in brief: key national indicators of well-being. 2008. Available at: http://www.childstats.gov.

Ferguson CJ, San Miguel C, Kilburn J, Sanchez P. (2007) The effectiveness of school-based anti-bullying programs: a meta-analytic review. *Criminal Justice Rev* 3:401-4.

Gordon, Linda (1988) Heroes of Their Own Lives. The Politics and History of Family Violence. Boston 1880-1960. New York: Viking.

Griffin, K., Botvin, Gilbert J., Scheier, L., Diaz, T., Miller, N. (2000). Parenting Practices as Predictors of Substance Use, Delinquency, and Aggression among Urban Minority Youth: Moderating Effects of Family Structure and Gender. *Journal of Psychology of Addictive Behaviors,* 14 (2), 174-184.

Grossman, J. B., Price, M. L., Fellerath, V., Jucovy, L. Z., Kotloff, L. J., et al. (2002). *Multiple choices after school: Findings from the extended-services schools initiative*. Philadelphia, PA: Public Private Ventures.

Haynie DL, Nansel T, Eitel P. (2001) Bullies, victims, and bully/victims: distinct groups of at-risk youth. *J Early Adolesc* 21:29-49.

Heise L.,Garcia-Moreno, C. (2002) in *World Report on Violence and Health*, E.G. Krug *et al*., Eds. (WHO,Geneva).

Herrenkohl TI, Mason WA, Kosterman R, et al. (2004) Pathways from physical childhood abuse to partner violence in young adulthood. *Violence Vict.* 19: 123–36

Hazen AL, Connelly CD, Kelleher KJ, Barth RP, Landsverk JA. (2006) Female caregivers' experience with intimate partner violence and behavior problems in children investigated as victims of maltreatment. *Pediatrics*. 117:99–109

Herrenkohl TI, Maguin E, Hill KG, Hawkins JD, Abbott RD, Catalano PF. (2000) Developmental risk factors for youth violence. *J Adolesc Health* 26:176-86.

Holden, G.W., & Ritchie, K. L. (1991) Linking extreme marital discord, child rearing, and child behavior problems: Evidence from battered woman. *Child Development*, 62, 311-327

Hornor, G. (2005) Domestic violence and children. *Journal of Pediatric Health Care*, **19,** 206–212.

Hughs, H. M. (1982) Brief Interventions with Children in Women's shelters: A model preventative program. *Fam Relat* 31: 495-502

Jacobson, K. C., & Crockett, L. J. (2000). Parental monitoring and adolescent adjustment: An ecological perspective. JOURNAL OF RESEARCH ON ADOLESCENCE, 10(1), 65-97. EJ 599 939.

Jaffe, P., Wilson, S., & Wolfe, D. (1986). Promoting changes in attitudes and understanding of conflict among child witnesses of family violence. *Canadian Journal of Behavioral Science*, 18, 356 - 380.

Kernic MA, Wolf ME, Holt VL, et al. (2003) Behavioral problems among children whose mothers are abused by an intimate partner. Child Abuse Negl. 27:1231–46.

Kitzmann, K., Gaylord, N., Holt, A. & Kenny, E. (2003) Child witnesses to domestic violence: a meta-analytic review. *Journal of Consulting Clinical Psychology*, 71, 339–352.

Kolbo, J. R., Blakely, E., & Engleman, D. (1996). Children who witness domestic violence: A review of empirical literature. *Journal of Interpersonal Violence*, 11, 281-293.

Lang AJ, Stein MB, Kennedy CM, Foy DW. (2004) Adult psychopathology and intimate partner violence among survivors of childhood maltreatment. *J Interpersonal Viol*. 19:1102–18

Larner, M. B., Zippiroli, L., & Behrman, R. E. (1999). When school is out: Analysis and recommendations. *Future of Children,* 9(2), 4-20. EJ 600 557.

Leserman J, Drossman DA. (2007) Relationship of abuse history to functional gastrointestinal disorders and symptoms: some possible mediating mechanisms. *Trauma, Violence, & Abuse* 8(3):331–343

Levendosky, A.A., Huth-Bocks, A.C., Semel, M.A., & Shapiro, D.L. (2002). Trauma symptoms in preschool-age children exposed to domestic violence. *Journal of Interpersonal Violence*, 17(2), 150–164.

Lieberman, A. F., Van Horn, P., & Ozer, E. J. (2005). Preschooler witnesses of marital violence: Predictors and mediators of child behavior problems. *Development and Psychopathology*, 17, 385-396.

Linares,L.O., Heeren,T., Bronfman, E., Zuckerman,B.,Augustyn, M., & Tronick, E. (2001). A mediational model for the impact of exposure to community violence on early child behavior problems. *Child Development, 72,* 639–652.

Lockwood, D. 2007. *Violence among Middle School and High School Students: Analysis and Implications for Prevention*. National Department of Justice.

Malmquist, C. P. (1986). Children who witness parental murder: Posttraumatic aspects. *J. Am. Acad. Child Psychiat*. 25: 320-325.

Margolin, G., & Gordis, E.B. (2000). The effects of family and community violence on children. *Annual Review of Psychology*, 51, 445–479.

Max, W., Rice, D. P., Finkelstein, E., Bardwell, R. A. Leadbetter, S. (2004) The Economic Toll of Intimate Partner Violence Against Women in the United States, *Violence and Victims* 19(3) pp. 259-272

Maxwell, C. & Maxwell, S. (2003) Experiencing and witnessing familial aggression and their relationship to physical aggressive behaviors among Filipino adolescents. *Journal of Interpersonal Violence,* 18, 1432–1451.

McFarlane, J., Groff, J., O'Brien, A. & Watson, K. (2003) Behaviors of children who are exposed and not exposed to intimate partner violence: an analysis of 330 black, white and Hispanic Children. *Pediatrics*, 112, 202–207.

McGee, C. (1997) Children's experiences of domestic violence.*Child and Family SocialWork*, 2, 13–23.

McGee, R. A., & Wolfe, D. A. (1991). Psychological maltreatment: Toward an operational definition. *Development and Psychology*, *3*, 3–18.

Meltzer, Howard; Doos, Lucy; Vostanis, Panos; Ford, Tamsin; Goodman, Robert (2009) The mental health of children who witness domestic violence *Child & Family Social Work*, 14 (4)

Mercy J, Butchart A, Farrington D, Cerdá M. Youth violence. In: Krug E, Dahlberg LL, Mercy JA, Zwi AB, Lozano R, editors. (2002) The World Report on Violence and Health. Geneva (Switzerland): World Health Organization; p. 25–56.

Montaño, D. E., & Kasprzyk, D. (2008). Theory of reasoned action, theory of planned behavior, and the integrated behavioral model. In K. Glanz, B. K. Rimer & K. Viswanath (Eds.)

Nansel TR, Overpeck M, Pilla RS, Ruan WJ, Simons-Morton B, Scheidt P. (2001) Bullying behaviors among U.S. youth: Prevalence and association with psychosocial adjustment. *JAMA*; 285:2094-100.

O'Leary K. D., Barling J., Arias L., et al (1989) Prevalence and stability of physical aggression between spouses. *J Consult Clin Psychol* 57: 263-8

Olweus, D. 1993. *Bullying at School: What We Know and What We Can Do*. Cambridge, MA: Blackwell

Osofsky, J.D. (1999).The impact of violence on children. *The Future of Children*, *9,* 33–49.

Owen, A.E., Thompson, M. P., Mitchell, M. D., Kennebrew, S. Y., Paranjape, A., Reddick, T. L., Hargrove, G.L., and Kaslow, N. J. (2007) Perceived Social Support as a Mediator of the Link Between Intimate Partner Conflict and Child Adjustment, *Journal of Family Violence* 23 221-230.

Park J, Essex M, Zahn-Waxler C, Armstrong J, Klein M, Goldsmith H. (2005) Relational and overt aggression in middle childhood: early child and family risk factors. *Early Educ Dev*;16:233-56.

Peled, E. & Davis, D. (1995). Group work with children of battered women. Thousand Oaks, CA: Sage.

Peterson, D. (1991). Physically violent husbands of the 1890s and their resources. *Journal of Family Violence,* 6, 1-15

Pettit, G. S., Laird, R. D., Bates, J. E., & Dodge, K. A. (1997). Patterns of after-school care in middle childhood: risk factors and developmental outcomes. *Merrill-Palmer Quarterly, 43,* 515–538.

Pleck, E.H. (1987). Domestic tyranny: The making of social policy against family violence from Colonial times to present. New York: Oxford University Press

Plichta, Stacey (2004) Intimate Partner Violence and Physical Health Consequences, *J Interpers Violence* November 2004 vol. 19 no. 11 1296-1323

Polakowski, M. (1994). Linking self- and social control with deviance: Illuminating the structure underlying a general theory of crime and its relation to deviant activity. *Journal of Quantitative Criminology, 10,* 41–78.

Ponce AN, Williams MK, Allen GJ. (2004) Experience of maltreatment as a child and acceptance of violence in adult intimate relationships: mediating effects of distortions in cognitive schemas. *Violence Vict*. 19: 97–108.

Pynoos, R.S. & Eth, S. (1984). The child as a witness to homicide. *Journal of Social Issues,* 40, 87-108.

Resnick, H., & Aciemo, R. (1997). Health impact of interpersonal violence: Medical and mental health outcomes. *Behavioral Medicine, 23,* 53-64.

Roberts, T. A., Klein, J. D.., Fisher, S. (2003) Longitudinal Effect of Intimate Partner Abuse on High-Risk Behavior Among Adolescents, *Arch Pediatr Adolesc Med* 157 pp. 875-881

Rosenberg, M. (1987). Children of battered women: The effects of witnessing violence on their social problem-solving abilities. *Behavior Therapist, 10,* 85–89.

Samuelson, K. W. & Cashman, C. (2008). Effects of intimate partner violence and maternal posttraumatic stress symptoms on children's emotional and behavioral functioning. *Journal of Emotional Abuse, 8*: 139-153

Silverman, J. G., Raj, A., Mucci, L. A., Hathaway J. E. (2001) Dating Violence Against Adolescent Girls and Associated Substance Use, Unhealthy Weight control, Sexual Risk Behavior, Pregnancy, and Suicidality, *JAMA* 286 (5) pp. 572-579

Smith PK, Sharp S. (1994) School bullying: insights and perspectives. London: Routledge

Somer, E., & Braunstein, A. (1999). Are children exposed to interparental violence being psychologically maltreated? *Aggression and Violent Behavior, 4*, 449–456.

Spaccarelli, S., Coatsworth, J.D. & Bowden, B.S. (1995). Exposure to serious family violence among incarcerated boys: Its association with violent offending and potential mediating variables. *Violence and Victims*, 10, 163-182.

Sprott J, Doob A, Jenkins J. (2001) Problem behavior and delinquency in children and youth. Toronto: Canadian Centre for Justice Statistics.

Straus, M.A. (1992). Children as witnesses to marital violence: A risk factor for lifelong problems among a nationally representative sample of American men and women. Report of the Twenty-Third Ross Roundtable. Columbus, OH: Ross Laboratories.

Sullivan, M., Egan, M. & Gooch, M. (2004) Conjoint interventions for adult victims and children of domestic violence: a program evaluation. *Research on Social Work Practice*, 14, 163–170.

Summer Program for At-Risk Students, South Bend Indiana (1995). Extending Learning Time for Disadvantaged Students vol.2.

The Office of Juvenile Justice and Delinquency Prevention. (1992). *Juvenile Violence Research Studies.* Paper reported the Committee on Education and the Workforce of the House of Representatives and the Committee on the Judiciary of the Senate. November 8, 1992

Tjaden, P.,& Thoennes, N. (2000). Prevalence and consequences of male-to-female and female to-male intimate partner violence as measured by the National Violence Against Women Survey. *Violence Against Women*, *6*, 142-161.

US Department of Education. (2003). *When schools stay open late: The national evaluation of the 21st-Century Community Learning Centers program*. (PublicationNo. ED-99-CO-0134). Jessup, MD: Author.

US Department of Justice. Office of Justice Programs, Bureau of Statistics, Intimate Partner Violence (2000; revised 2002). Available at: http://www.ojp.usdoj.gov/ bjs/pub/pdf/ipv.pdf.

Van Dijk J, van Kesteren J, Smit P. Criminal victimization in international perspective. The Hague: United Nations Office on Drug and Crime; 2007.

Vandell, D. L., & Corasaniti, M. A. (1988). The relation between third graders' after-school care and social, academic, and emotional functioning. *Child Development*, *59*, 868–875.

Von Steen, P. (1997) Adults with witnessing histories: the overlooked victims of domestic violence. *Psychotherapy*, 34, 478– 484.

Weissman, S. A., Soule, D. A., Gottfredson, D., Lu, S., Kellstrom, M. A.,Womer, S. C., et al. (2003, June). *After-school programs, antisocial behavior, and positive youth development:*

Program implementation and youth outcomes. Paper presented at the meeting of the Society for Prevention Research, Washington, DC.

Wolak, J., & Finkelhor, D. (1998). Children exposed to partner violence. In J. L. Jasinski & L.M. Williams (Eds.), *Partner violence: A comprehensive review of 20 years of research* (pp. 73-112). Thousand Oaks, CA: Sage.

Zinc, T. & Jacobson, J. (2003) Screening for intimate partner violence when children are present: the victim's perspective. *Journal of Interpersonal Violence*, 18, 872–889

Zuckerman, B., Augustyn, M., Groves, B. & Parker, S. (1995) Silent victims revised: the special case of domestic violence. *Pediatrics*, 96**,** 511–513.