

The Consequences of Being a Victim and Witness of Family Violence as Reported by  
Mothers and Child Victims

by

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## TABLE OF CONTENTS

<b>ACKNOWLEDGMENTS.....</b>	<b>ii</b>
<b>ABSTRACT .....</b>	<b>v</b>
<b>LIST OF TABLES.....</b>	<b>vi</b>
<b>INTRODUCTION .....</b>	<b>1</b>
<b>Statement of the Problem .....</b>	<b>1</b>
<b>Theoretical Framework .....</b>	<b>3</b>
Purpose of the Current Study .....	5
<b>Literature Review .....</b>	<b>7</b>
Prevalence and Incident Rates .....	7
Definitions.....	8
Family violence.....	8
Child physical abuse (CPA).....	9
Child sexual abuse (CSA).....	9
Conduct disorder (CD).....	9
PTSD .....	9
Social Learning Theory.....	9
Akers’ Social Learning Model of Criminality .....	13
Sequela of Sexual Abuse.....	14
Family Violence, Abuse, CD, and PTSD.....	15
Co-occurrence of abuse and witnessing family violence.....	15
PTSD .....	19
CD .....	23
Comorbidity of PTSD and CD.....	25
Gender Differences and Outcomes .....	27
The Current Study .....	29
<b>METHODS.....</b>	<b>31</b>
Data .....	31
Participants.....	32
Measures .....	33
DICA-C and DICA-P (Reich & Welner, 1988).....	33
ADI.....	34
The Health Resiliency Intervention for Violence Exposure (THRIVE) Student Screening Questionnaire .....	34

**RESULTS.....36**

- Consequences of Witnessing Family Violence for the Whole Sample.....37
  - Parent-reported symptoms .....37
  - Child-reported symptoms.....38
- CSA and Witnessing Family Violence .....39
- CPA and Witnessing Family Violence .....40
- Comparison of Parent and Child Reports .....41
- Summary .....41

**DISCUSSION.....42**

- Cost of Abuse and Witnessing Family Violence .....46
- Limitations .....48
- Future Directions.....50

**References.....53**

## **ABSTRACT**

This study investigates the association between witnessing family violence and children's symptoms of psychopathology. The aim of the study was to examine what children's mental health problems might result from living in a home where violence between family members is evident. Determining this association is crucial for understanding under what circumstances conduct disorder (CD) and post-traumatic stress disorder (PTSD) may occur in order to develop appropriate treatment, intervention and prevention programs. This dissertation is unique in that it overcomes the limitations of previous studies regarding the consequences of witnessing family violence for children. Specifically, this study included both child reported behaviors and mother reported behaviors and a large clinical sample of 169 children aged 7-13. The current study builds on the literature as it includes the importance of witnessing family violence and not solely being a direct victim of abuse in the development of PTSD and CD. Last, this study employs a variable weighting process in order to determine the roles of severity and type of domestic violence on child PTSD and CD. Being a victim of child physical abuse (CPA) and witnessing family violence predicted parent reported child PTSD but not child reported PTSD symptoms. Being a victim of CSA and witnessing family violence did not predict parent or child reported child PTSD.

## **LIST OF TABLES**

3.1	Characteristics of the Sample.....	31
4.1	Frequency of Family Violence Witnessed.....	35
4.2	Predictors of Parent-Reported PTSD for the Whole Sample.....	36
4.3	Group Differences on PTSD and Witnessing Family Violence .....	36
4.4	Predictors of DICA-P Conduct Disorder for the Whole Sample .....	37
4.5	Predictors of Parent-Reported CD for CSA.....	38
4.6	Gender Differences for Sexually Abused Children on Parent Reported CD.....	38

## **CHAPTER I**

### **INTRODUCTION**

#### **Statement of the Problem**

The statistics regarding family violence in 2012 showed that there were approximately 200,000 incidents of domestic violence, 114 women killed, and 14,534 children sheltered (Texas Council on Family Violence, 2015). Additionally, around the world, approximately 31,000 children under the age of 15 years died as an outcome of domestic violence and maltreatment in 2002 (Butchart, Phinney, Kahane, Mian, & Furniss, 2006). It is apparent that family violence is dangerous and can result in death and physical injury for children; however, only recently has research been directed towards understanding the emotional and behavioral outcomes for children who witness family violence. Appel and Holden (1998) explain that one reason for the lack of focus on child outcomes as a result of family violence is because past research has been divided. Specifically, researchers have focused either on spousal abuse or child maltreatment, but have failed to examine both in the same study.

A safe home environment is imperative for a child's healthy developmental trajectory (Osofsky, 1998). Children who are exposed to interparental violence have been given the title, "silent victims" (Augustyn, Saxe, Groves, & Zuckerman, 2003). Because they show no indication of physical harm, they are usually overlooked in the public health spectrum (Groves, Zuckerman, Marans, & Cohen, 1993). Researchers explain that witnessing interparental violence and/or experiencing violence may result in a loss of trust and betrayal (Becker-Blease & Freyd, 2005). This is an imperative issue that must be addressed as it is estimated that over 3 million children a year witness domestic violence in their home (American Psychological Association; APA, 1996).

Children who witness family violence engage in emotional and behavioral difficulties similar to child physical abuse (CPA) victims (Children's Defense Fund, 2009). Additionally, statistics show that approximately 40% to 60% of children who witness family violence are also victims of physical abuse (U.S Department of Veteran Affairs, 2015). These consequences may also maintain into adulthood in which they experience a higher risk of suicidal behaviors, substance abuse, unemployment, and becoming violent themselves (Children's Defense Fund, 2009). Therefore, researchers claim that these maladaptive behaviors result in an unremitting cycle of violence, meaning that their children generate a new cohort of victims and witnesses. Family violence constitutes aggressive and coercive actions involving physical, sexual, and psychological assaults that are utilized by adults in their relationships later (Children's Defense Fund, 2009).

Family violence involves a vast number of contexts that may be defined as violent and abusive and they can differ in frequency, duration, and brutality (Wolak & Finkelhor, 1998). Family violence is not limited to physical aggression and can include verbal threats, emotional abuse, sexual assault, and even murder (Davis & Briggs, 2000). Witnessing violence between parents may involve hearing verbal threats, attempting to mediate, calling the police, observing physical fighting, or being exposed to the bruises of the victim (Wolfe et al., 2003). Graham- Bermann (2002) declared that researchers and agencies face the challenges of defining family violence and the availability of interventions to eliminate or reduce the problem. Specifically, there is no requirement to report supposed interparental violence, which is not the case for reporting child abuse. There are more cases of reported child abuse than there are domestic violence, but it has

been substantiated that child abuse often occurs in homes in which interparental violence is also evident (Graham-Bermann, 2002).

Clinicians and researchers advocate studying family violence and child abuse due to the amount of research that indicates detrimental outcomes, including; maladaptive behavioral, emotional, and social functioning for child victims (Davis & Briggs, 2000). In addition, studies show that children are deeply affected by family violence and aggression, even when they are not the direct victim (Davis & Briggs, 2000). It has only been within the past two decades that exposure to interparental violence has been considered traumatic and detrimental to the victims (Carlson, 2000). This acknowledgement is of extreme importance, as approximately 30% of children in the United States have witnessed violence between their parents (Carlson, 2000; McDonald, Jouriles, Ramisetty-Mitkler, Caetano, & Green, 2006).

Researchers have come to different conclusions regarding the impact of child abuse and the consequences of exposure to numerous family violence events for children. For example, some studies have shown that being both a witness of family violence and a victim of abuse results in a higher prevalence of PTSD symptoms compared to children who are only victims of abuse or only witness family violence (McCloskey & Walker, 2000). However, other studies have revealed that experiencing many types of family violence does not exacerbate trauma symptoms for victims (Sternberg et al., 1993). Studies are reviewed in the following sections.

### **Theoretical Framework**

Social learning theory is an appropriate theoretical framework for understanding how aggressive and conduct disordered behaviors can be learned by children who grow

up in violent homes. According to Bandura (1977), behavior is learned from the environment via observational learning. In Bandura, Ross, & Ross' (1961) Bobo doll experiment, the researchers illustrate how children may become aggressive by watching others act aggressively. In this study, participants were divided into eight experimental groups (6 children in each group) and a control group (24 child participants). Half of the participants in the experimental group observed aggressive models and half observed models that were submissive or nonaggressive. These groups were then divided by gender. The control group was not shown the adult models and was tested only in the generalization condition (Bandura et al., 1961). The results revealed that exposure to nonaggressive models reduced the likelihood of aggressive behavior. Additionally, Bandura et al., (1961) found that children exposed to the aggressive models imitated the learned aggressive behaviors, and their mean aggression scores were higher than children in the nonaggressive and control groups. Additionally, children exposed to the aggressive models were significantly less inhibited in their behaviors compared to children in the nonaggressive group. The researchers concluded that the social learning theory was supported, and the experiment revealed that aggressive behaviors were learned through observation and imitation.

An application of social learning theory to the family explains how children may model behavior they observe in their home. Aggression and violence is learned by being exposed to interparental violence and is reinforced in childhood and potentially continued in adulthood (Mihalic & Elliot, 1997). Children may internalize ideals of appropriate relationship behavior by observing their parents' interactions. Therefore, when parents deal with stress using aggression, the child who is exposed to this aggression is at a

higher risk for implementing these same aggressive tendencies or conduct disordered behavior compared to children who do not experience or witness intrafamilial violence (Mihalic & Elliot, 1997). Akers' social learning model of criminality is also discussed in order to understand the trajectory of engaging in aggressive behavior as a result of witnessing family violence as a child.

### **Purpose of the Current Study**

Past studies have neglected to include severity and type of violence when studying children who experience family violence (Davis & Briggs, 2000). Recently, researchers have acknowledged that an important limitation of past studies investigating domestic violence is that victims of child abuse are often not evaluated even though this population is at risk (Davis & Briggs, 2000). Researchers have also suggested that family violence in which the child is involved is more detrimental to the child compared to family violence in which the child is not included (Carlson, 2000; Sternberg, Lamb, Guterman, & Abbott, 2006). Therefore, it is imperative to study the consequences for children who have witnessed family violence directly and are not just aware that violence exists in their family.

The current study investigated the prevalence of PTSD and CD among a clinical sample of children who were victims of CSA or CPA, and who also witnessed family violence. It is predicted that witnessing family violence will lead to the development of PTSD and CD symptomatology for both CPA and CSA victims. This dissertation will initiate with a review of how social learning theory explains how CD behavior may develop from being a witness and victim of child abuse and how CD is a potential consequence for these children. Although this study does not investigate criminal

activity, it is important to be aware of how CD may lead to the progression of serious violent and criminal acts. Additionally, this study also examines how being a witness and victim of child abuse may predict PTSD. PTSD and CD are examined as possible consequences for both CSA and CPA victims who witness family violence because studies have largely focused on PTSD as a consequence for CSA victims, with the exclusion of other consequences (Kendall-Tackett, Williams, & Finkelhor, 1993). Additionally, studies have confirmed the comorbidity of PTSD and CD for victims/witnesses of family violence (Afifi et al., 2011) and that children who are dually exposed to family violence (e.g, being a witness and victim), experience more behavioral problems (Hughes, 1988).

## **CHAPTER II**

### **Literature Review**

#### **Prevalence and Incident Rates**

Family violence incident rates are provided by government agencies based on confirmed cases as documented by law enforcement and social services. Self reports obtained from victims and perpetrators are also utilized to determine the number of incidents. Some issues with reporting include the fact that doctors are not trained to recognize child abuse and others may choose not to report abuse due to not knowing if the abuse actually occurred (Barnett, Miller-Perrin, & Perrin, 2011). Regarding witnessing FV, it is estimated that every year, between 3 and 10 million children, or 10% to 20% of children in the United States, observe some form of intrafamilial violence (Carlson, 2000; Jouriles, McDonald, Norwood, & Ezell, 2001).

Child abuse is reported every 10 seconds and 3.3 million reports of child abuse are made in the United States every year (United States Department of Human & Health Services, 2011). Approximately 16% of these cases involve physically abused children, and 10% of these reported cases are children who are victims of sexual abuse (USDHHS, 2011). The National Incidence Study IV (Sedlak et al., 2010) found that approximately 323,000 children were victims of physical abuse between 2005 and 2006 (Larsen, Sandberg, Harper, & Bean, 2011). According to Kolko (2002), how CPA is defined, and methods involved within protection agencies may impact the actual incidence and prevalence rates of CPA. For example, reporting may be based on how CPA is defined by the state. Due to the discrepancies in definitions of what should be constituted as CPA and what must be reported, the actual number of CPA cases is unknown in the U.S (Kolko,

2002). It has been documented in some studies, however, that CPA accounts for 27% of all maltreatment (Kolko, 2002).

Finkelhor (1991) proposed that the best method for capturing the true incidence rates of CSA are the responses from community surveys. These surveys have shown that approximately 6% to 62% of women and 2% to 15% of men have indicated being a victim of CSA (Finkelhor, 1991). The actual prevalence rate of CPA and CSA is impossible to determine because abuse is often unreported due to shame, fear of publicity, fear of having to tell on the abuser who may be a friend or family member, and embarrassment (Finkelhor, Ormrod, & Turner, 2009). Researchers have acknowledged that the incidence rate is higher than what is actually reported.

### **Definitions**

**Family violence.** Currently, there is no widely acknowledged definition of family violence. However, Wallace (2002) describes it as, “any act or omission by persons who are cohabiting that results in serious injury {physical or emotional} to other members of the family” (p.2, in Adams, 2006). In 14 States, including Arkansas, the definition of witnessing family violence is more inclusive than others as it acknowledges that witnessing family violence involves the physical presence of the child or the child is within distance to hear the act of violence (Child Welfare Information Gateway; CWIG, 2013). In 10 states, also including Arkansas, the laws of family violence exposure apply to a child who is related to the perpetrator or victim involved in the violence (CWIG, 2013). Additionally, in Arkansas, the consequences for a family violence perpetrator can be extended for up to ten years and at the least, one year, if the violence is committed in the presence of a child (CWIG, 2013).

**Child physical abuse (CPA).** CPA is defined by some agencies as physical harm to a child by a caregiver, relative or parent and includes bruises, welts, burns, wounds, cuts, bone and skull fractures, and other physical injuries where there is evidence (Livingston, Lawson, & Jones, 1993). However, Kolko (2002) argues that unlike most mental health diagnoses, the definition of CPA is based on social perceptions and is influenced by various socio-demographic characteristics combined with the child's physical and medical condition.

**Child sexual abuse (CSA).** CSA is defined by Finkelhor (1991) as sexual contact with a child that is caused by force or the result of an exploitative relationship due to an age discrepancy or caretaking obligation. Researchers and clinicians admit that not everyone abides by this definition and, therefore, inaccurate incidence rates may result.

**Conduct disorder (CD).** CD is a psychiatric disorder diagnosed in childhood and/or adolescence that is defined by aggressive, delinquent, and deceiving behavior (American Psychiatric Association, 2000). These behaviors involve bullying, perpetrating physical or sexual violence, stealing and vandalizing (APA, 2000).

**PTSD.** PTSD develops after the exposure to a traumatic event (Friedman, Resick, Bryant, & Brewin, 2011). PTSD involves many symptoms which can be categorized into three groups; re-experiencing symptoms (flashbacks), avoidance symptoms (emotional numbness and avoiding certain people and places), and hyperarousal symptoms such as being easily startled (The National Institute of Mental Health, 2015).

### **Social Learning Theory**

Social learning theory is applied to family violence situations as it allows for understanding the effects of witnessing intrafamilial violence on children. Bandura and

Walters (1963) indicated that aggressive behavior develops and is maintained via observational learning, imitation, and modeling. Specifically, individuals learn violent behaviors and are not born aggressive (Bandura & Walters, 1963). Learning to abuse by observing an abuser may lead the child to model the violent behavior. A key concept of the theory suggests that observations influence behaviors. In an application of social learning theory to family violence and behavior, Foshee, Bauman, and Linder (1999) explained that learning and modeling are more probable when those modeling the behavior are competent, powerful, and of higher status (Bandura, 1977). Therefore, because parents are usually perceived by their children as encompassing these qualities, they are the key resource of their child's learning and understanding (Foshee et al., 1999). These theoretical principles were demonstrated in the study conducted by Sternberg et al., (2006) which found that children in violent homes were rated by both parents and teachers as more aggressive than their peers. Attention, retention, reproduction and motivation are the necessary components that facilitate learning and modeling (Bandura, 1973; 1977). Abiding by social learning theory, children who witness intrafamilial violence may choose to use aggression and violence in their interactions because they have seen more positive than negative outcomes of violence used by their parents. The child may witness the abuser gain control over his/her spouse, which may be internalized by the child as a mechanism for achieving one's goals. The child realizes that through abuse, the dominant spouse achieved submission from the victim (Foshee et al., 1999). This results in the child creating positive expectations regarding the use of violence (Foshee et al., 1999). For example, Spaccarelli, Coatworth, and Bowden (1995) found support for this relationship in a sample of 213 adolescent boys who were imprisoned for violent criminal behavior. Specifically, boys who had witnessed

FV held the belief that aggression improves one's reputation (Spaccarelli et al., 1995, p. 173). Additionally, this belief that aggression improves reputation predicted violent behavior in Spaccarelli et al.'s (1995) study.

On the other hand, researchers have proposed that if the child had witnessed more negative outcomes (arrest of perpetrating parent) than positive outcomes related to family violence, then the child would develop negative expectations for violence and aggression and, therefore, would refrain from using aggression and violence in their interactions. Abiding by this theory, children create behavior standards based on the feedback they receive from others (Bandura, 1989). Research involving several different strategies has established a strong association between witnessing family violence and conduct disorder problems (Akers, 1998). However, not all children become aggressive. For example, Kitzmann, Gaylord, Holt, & Kenny (2003) found that 37% of children who witness family violence fare as well or better than children not exposed. Additionally, Cooper (1992) found that witnessing family violence was related to clinical levels of behavioral problems for one-third of boys and one-fifth of girls, which is lower than predicted by most researchers. Therefore, results are mixed and require further examination in which social learning theory can serve as a framework to understand why some children exposed to family violence do not become aggressive.

Investigators are concerned with the extent to which children who experience family violence become perpetrators of violence later in life. According to an interpretation of social learning theory, researchers postulate that abuse victims and those who witness family violence will have the highest propensity for aggression. A child who is a victim of violence may model the physical acts learned through victimization (Akers, 1998). Studies

on criminal offending indicate that violent people report higher percentages of physical abuse than do nonviolent comparison groups (Widom, 1989). In a prospective study using substantiated cases of child abuse and neglect and a matched control group, Widom (1989) found that childhood abuse increased a person's risk of being arrested in adolescence by 50%. Maltreated children also had twice the number of arrests in adolescence compared to the control group (Widom, 1989). Evidence indicates that there is a higher probability that parents will become abusers if they were abused as children (Widom, 1989). However, Widom (1989) indicated that the majority of maltreated children did not become criminals (Widom, 1989). Therefore, it is imperative to understand the vastly different results concerning the likelihood of victims becoming abusers later when studying the influences of family violence and victimization. Widom (1989) warns researchers to review the methodology of these studies as some are dependent on retrospective and self-report surveys, gather inadequate records of abuse, or fail to utilize a control group.

Criminal justice researchers and clinicians have articulated apprehension regarding the negative consequences of child physical abuse/witnessing family violence and the increased likelihood of these children becoming juvenile delinquents (Cicchetti & Toth, 1995). Although the research does not propose one independent element that accounts for the development of CD, researchers have started to identify childhood victimization as a risk factor for CD, externalizing behaviors, criminality and violence. The current study examines how child abuse and witnessing family violence predicts CD, as studies suggest that CD is a risk factor for later criminal activity (Babinski, Hartsough, & Lambert, 1999). Researchers have found, for example, that children with CD have more arrests as adults compared to those who do not have CD (Babinski et al., 1999).

**Akers' Social Learning Model of Criminality.** This model of criminality (Akers, 1985; 1998) provides insight into the context of environmental factors that create negative parent-child relationships and lead to youth criminal behavior. The theoretical underlying principle presumes that aggression and externalizing behaviors develop from situations connected with the aggressive conduct. Thereafter, these behaviors progress into a routine that is reinforced in a setting in which parent-child interaction patterns continue to model or encourage criminal behavior. This model infers that learning develops through the process of observing either directly or indirectly aggressive instances such as parental fighting (Akers, 1998). This theory implies that negative behaviors are modeled during childhood by influential individuals such as parents, peers, teachers, and caregivers. Studies show that a history of abuse is a critical aspect that predicts externalizing behavior and delinquency (Akers, 1998). Utilizing the prospective data from the Rochester Youth Development Study, Kelly, Thornberry, and Smith (1997) found that physically abused children are at least 25% more likely than nonabused children to experience delinquency, teen pregnancy, low academic achievement, and mental health problems (Kelly, Thornberry & Smith, 1997). However, the results of this study also showed that 25% of maltreated youth didn't exhibit any behavioral problems (Kelly et al., 1997). 1000 adolescent participants were included in this study and 14% of the participants had a record of child maltreatment. For both minor and severe delinquency, maltreated youth had significantly higher frequencies of delinquent acts as determined by self-reported offenses and official police records of delinquency than did nonmaltreated youth (Kelly et al., 1997). In addition, a National Institute of Justice study of 877 documented cases of child abuse and/or neglect from court dependency records conducted by English, Widom, and

Brandford (2004) found evidence for the relationship between being a victim of CPA and criminal offending. Type of abuse and neglect was coded using the modified version of the Maltreatment Classification Coding Scheme (MCS; Barnett, Manly & Cicchetti, 1993). Univariate, bivariate and multivariate analyses revealed that CPA victims were 11 times more likely to be arrested for criminal behavior as a juvenile, 2.7 times more likely to be arrested for violent and criminal behavior as an adult, and 3.1 times more likely than nonabused children to be arrested for one of many forms of violent crime (English et al., 2004). The control group of children was matched based on age, race/ethnicity, gender, and parent social class (English et al., 2004). Other researchers have found that parents are often victims of abuse during their own childhoods and it is estimated that approximately one-third of abused children will victimize their own children (English et al., 2004).

### **Sequela of Sexual Abuse**

Research has substantiated that CSA victims are at a high risk for developing PTSD (Huston & Parra, 1995; Kendall-Tackett et al., 1993). In a review of 45 studies, Kendall-Tackett and associates (1993) found that PTSD and sexualized behaviors were the only two symptoms that CSA victims displayed more than nonabused clinical children. Therefore, the majority of the studies found that CSA victims showed less symptomatic behavior than did other clinical children. However, the researchers note that the results of these studies may not be accurate due to the fact that clinical comparison groups may actually include children who have been abused but may not have disclosed the abuse. Therefore, the comparison is not abused-versus-nonabused. Also, clinical groups involve children who are referred due to their behavior problems (Kendall-Tackett et al., 1993). The researchers claimed that PTSD is a central consequence of CSA as evidenced by its

high frequency amongst CSA victims compared to other clinical populations. Kendall-Tackett et al., (1993) found that in studies using criteria from the DSM-3R (APA, 1987), PTSD was diagnosed for 48% (McLeer et al., 1988) and 21% (Deblinger, McLeer, Atkins, Ralphe, & Foa, 1989) of CSA victims.

CSA victims have also reported high levels of externalizing and aggressive behaviors, but the research regarding this relationship is scarce (Conte & Schuerman, 1987; Kendall-Tackett et al., 1993). In their review, Kendall- Tackett and associates (1993) discovered that being a victim of sexual abuse accounted for 43% of the variance in aggression and sexualized behavior outcomes. In a study of 85 sexually abused children aged 3-12 conducted by Friedrich, Urquiza and Beilke (1986), the researchers found that 40% of boys and 37% of girls reported high scores on the CBCL (Achenbach, 1991) for externalizing behaviors.

A child who witnesses intrafamilial violence may begin to believe that his/her world is not safe and is unstable. According to social learning theory, the child may perceive the abusing parent as dangerous and, therefore, the child emotionally and physically withdraws in order to avoid being hurt. Additionally, the child may avoid certain places and/or people as a learned mechanism for preventing anxiety associated with the abusive stimulus. These symptoms are included in the diagnosis for PTSD, which may explain why these children exhibit these symptoms following an abusive event.

### **Family Violence, Abuse, CD, and PTSD**

**Co-occurrence of abuse and witnessing family violence.** Researchers have posed the question, “are children who witness family violence at an increased risk of being abused themselves” (Appel & Holden, 1998)? Evidence has substantiated that when intrafamilial

violence occurs, children in these homes are 15 times more likely to also be abused when compared to the general population (Wisconsin Coalition Against Domestic Violence, 2003). Graham-Bermann (2002) declared that studies have found a co-occurrence of 20%-100% for clinical samples. In addition, Appel and Holden (1998) found in a review of 31 empirical studies, that there is a 40% co-occurrence percentage between abuse and intrafamilial violence in clinical samples and only a 6% co-occurrence for nonclinical samples. This is an important distinction as the current study analyzes a clinical sample where the co-occurrence between abuse and family violence is potentially high. In a study of 101 adolescents who were in residential treatment and had been physically abused, half of these adolescents indicated that they had also witnessed family violence (Carlson, 1991). In a study conducted by Bowker, Arbitell, & McFerron (1988), the responses of questionnaires from 1,000 women revealed that wife beaters abused children in 70% of the families in the study. Girls who witnessed family violence were 6.5 times more likely to also be sexually abused when compared to children who did not witness family violence (Bowker et al., 1988; Graham-Bermann, 2002). Rosenbaum and O'Leary (1981) declared that witnessing family violence has similar damaging effects for children compared to direct abuse.

Grych, Jouriles, Swank, McDonald, and Norwood (2000) argued that witnessing and experiencing violence in the family overburdens the child's coping resources and increases the risk of the child developing psychopathology. In addition, research has suggested that there is potential comorbidity between marital problems, violence, and abuse (Cummings, Vogel, Cummings, and El-Sheikh, 1989; Jouriles & Le Compte, 1991).

A child's exposure to multiple types of violence is an important consideration in the likelihood that they will experience PTSD (Haj-Yahia, Tishby, & Zoysa, 2009).

It is imperative to understand the etiology of becoming an abuser, as studies have confirmed that being a victim of abuse and witnessing family violence are associated with becoming violent and aggressive later (Miller, et al., 1991). For example, in a study conducted by Miller et al., (1991) the results of an ANOVA revealed that Black adolescents who had witnessed violence and/or been a victim of abuse, scored higher on the Child Abuse Potential Inventory (CAP; Miller, 1986) than adolescents who had not witnessed family violence. According to Miller (1986), the concurrent predictive validity of the CAP has been established as it correctly classifies child abusers from comparison groups within diverse populations 80% to 90% of the time. The classification rates are based on discriminant analyses. A demographic questionnaire was used to determine history of exposure to family violence. The researchers did not provide a descriptive explanation of the items used to assess family violence exposure, which may be seen as a limitation for their study. However, their study did establish that abuse and witnessing family violence is related to a higher potential for becoming abusive, as suggested by results on the CAP.

Retrospective studies conducted by numerous researchers have revealed the high risk associated with child abuse for later offending. For example, Rhoades and Parker (1981) found that 58% of the 191 juvenile delinquents in their study had been abused by their fathers and 40% had been abused by their mothers. In addition, Steele (1976) discovered that 82% of 100 juvenile delinquents had reported being abused or neglected. However, these aforementioned studies are limited, as the abuse reports were not corroborated. To overcome this limitation, Alfaro (1978, 1981) used a sample of delinquent

children and found that 21% of the boys and 29% of the girls had substantiated cases of abuse or neglect, as reported to officials.

Some prospective studies have discovered similar findings. For example, Silver, Dublin, and Lourie (1969) conducted a prospective study involving 34 victims of child abuse. The results of the study revealed that of those child abuse victims, 20% became juvenile delinquents within four years. Bolton, Reich, & Gutierrez, (1977) also conducted a prospective study of 5392 child abuse and neglect victims and found that 32% of these children had become delinquents ten years later. The results of prospective studies are essential as they allow for temporal sequencing in examining the relationship between early child abuse and later offending.

Evans, Davies, and DiLillo (2008) reviewed studies on the effects of children who are both witnesses and victims of domestic violence and found conflicting results. In a meta-analysis of 1870 participants conducted by Sternberg et al., (2006), the researchers concluded that type of violence was a significant predictor of internalizing and externalizing behavior problems. The researchers discovered that children who were victims of abuse and witnessed family violence were 2.91 times more likely to have externalizing behavior problems than those in the comparison control group (no violence). In contrast, Sternberg et al., (1993) conducted a study which included children who were abused only, children who had witnessed family violence only, and children who were victims and witnesses of family violence. A control group was used for comparisons and the results of an ANOVA revealed that children who were both witnesses and victims of family violence did not exhibit higher levels of internalizing and externalizing behaviors than those who were abused only or only witnessed violence. In a study of 42 boys and 55

girls from a shelter, Additionally, Hughes (1988) discovered that child abuse victims who were also victims of family violence had more externalizing and internalizing behavior problems than those who only witnessed family violence.

Research on this topic allows for understanding prospective factors that may protect CPA and CSA victims from developing conduct and delinquent behaviors that may lead to criminal activity during adolescence. Understanding how conduct disorder behaviors result from CPA and CSA may enlighten researchers as to how these harmful behaviors can be prevented. In addition, preventing maladaptive behaviors may also protect the physically or sexually abused child from engaging in criminal acts when older.

**PTSD.** According to the National Institute of Mental Health (2015), 7.7 million American adults are victims of PTSD, but there is no age limit on PTSD, and it can be diagnosed in childhood. Importantly, not all who are diagnosed with PTSD have experienced a perilous event, and PTSD symptoms may develop following the injury of a family member (NIMH, 2013). Despite the importance of examining PTSD in at risk populations, few studies have included trauma symptoms as a potential consequence of witnessing intrafamilial violence (Evans et al., 2008).

Witnessing family violence may result in PTSD symptoms such as; reexperiencing the violence (mentally) via flashbacks or dreams, hyperarousal or exaggerated responses to stimuli reminding them of the violence, and avoidance including withdrawing from activities that remind him/her of the violence (Graham-Bermann & Levendosky, 1998). A study conducted by Haj-Yahia et al., (2009) revealed that witnessing interparental violence and experiencing parental violence during childhood is related to adult PTSD. In a study which provided a self-administered questionnaire to over 400 students from Sri Lanka, the

researchers found that adults exhibited more PTSD symptoms when they indicated that they were both victims and witnesses of parental violence. The researchers noted that socio-demographic qualities were not as influential in explaining PTSD symptoms as were the effects of witnessing family violence. In addition, children who witness family violence may react in a manner that increases their risk for harmful consequences. Children may leave their homes in order to escape the violence which augments the possibility for drug and alcohol use, physical illness or harm, and victimization (Davis & Briggs, 2000).

In a study of 40 child homicide witnesses, Pynoos and Eth (1984) found that their sample of children encompassed most, if not at all, PTSD symptoms including sleep problems, anxiety, and compulsions. PTSD symptoms were defined by the DSM III (APA, 1980). The clinical observations included: tape-recordings of the first police interview with the child, and interviews employed by the researchers a few weeks after the homicide. The researchers also found that the child witnesses exhibited high levels of anxiety and that the preschool children tended to reenact the traumatic event. For example, one four year old girl painted her hands red and pretended to stab herself with a paint brush following the death of her parent (Pynoos & Eth, 1984).

A study conducted by Cummings et al., (1989) found similar results. The researchers showed videotapes of verbal and physical abuse between adults to children and the results indicated that children were more negatively affected by the physical threats than by the verbal threats between adults. The methodology of their study was substantiated by high test-retest reliability and little verification of context effects. On the other hand, it was also concluded that the situation, environment, and actors in the study may have influenced effects on responding. Therefore, the study is not without its limitations

(Cummings et al., 1989). However, studies such as these expose the extremely harmful effects of witnessing family violence for children.

Witnessing violence may cause the victim to adopt a negative perspective of the world as unsafe and inconsistent. The child views the parent as dangerous, and the abused parent may become emotionally withdrawn as a result of the violence. Subsequently, the child's emotional world is shaped by the parents' negative mood and decreased empathy (Margolin, 2005). Children who witness family violence are at risk for experiencing volatile emotional reactivity to anger and obtaining an insecure attachment style (Cicchetti & Toth, 2005). Researchers explain that this is because children view threats against their parent as traumatic. Researchers have indicated that PTSD symptoms are prevalent in approximately 20% of children who witness intrafamilial violence (Jarvis, Gordon, & Novaco, 2005; Linares & Cloitre, 2004; McCloskey & Walker, 2000). For example, in a study of 337 school aged children, results of the DICA-C (Reich & Welner, 1988) revealed that 24.6% of children who were exposed to family violence and/or death or illness of a close family member met the diagnostic criteria for PTSD (McCloskey & Walker, 2000). Importantly, family violence, not family accidents, predicted PTSD (McCloskey & Walker, 2000). This explains the importance of studying the trauma associated with witnessing intentional family violence acts as research has shown that it negatively impacts the child (McCloskey & Walker, 2000). It appears that some traumatic events, such as family violence and the death of a family member, are more likely to result in PTSD compared to other traumatic events, such as accidents. Therefore, it is imperative to study the consequences of different types of traumatic situations as not all events affect the child in a similar manner.

The results of a hierarchical regression analysis conducted by Jarvis et al., (2005) revealed that child PTSD was related to recurrent parental violence and longer duration of the violence. Utilizing the Conflict Tactics Scale Revised (CTSR; Straus, Hamby, Boney-McCoy, & Sugarman, 1996) to determine violence exposure, the researcher discovered that intervening in parental violence was significantly related to more PTSD symptoms for the child (Jarvis et al., 2005). Although the study's sample size was small, the study added to the literature as it focused on a more specific population; mothers and their children who reside in shelters following family violence.

Researchers have proclaimed that numerous studies have been conducted to determine the effect of CSA on PTSD. This is a serious problem because clinicians have largely relied on a PTSD diagnosis for victims of sexual abuse and thus, fail to acknowledge other potential outcomes (Finkelhor, 1988). Kendall- Tackett determined that PTSD is a central consequence of CSA as evidenced by its high frequency amongst CSA victims compared to other clinical populations. However, other studies have found that PTSD is not only associated with CSA even though close to 50% of CSA victims meet the criteria for a PTSD diagnosis (Kiser, Heston, Millsap, & Pruitt, 1991; Livingston et al., 1993).

Pelcovitz et al., (1994) declared that scarce research exists on the association between PTSD and CPA. Due to this concern, the researchers conducted a study to examine the prevalence of PTSD and other behavioral problems for 27 non-referred physically abused adolescents compared to 27 non-abused participants (Pelcovitz et al., 1994). The results of their study provided that CPA was associated with a greater risk for depression, CD, and internalizing and externalizing symptoms, but not PTSD. In addition, physically

abused adolescents did not experience more PTSD symptoms than the nonabused group (Pelcovitz et al. 1994). These findings also suggested that CPA victims may be more inclined to re-enact their victimization via aggression and externalizing behaviors (Pelcovitz et al., 1994). Additional research is necessary as this study employed a small sample with limited generalizability.

The current study also attempted to determine the prevalence of PTSD symptoms among CPA victims and CSA victims who witness family violence as little literature exists on this inquisition (Deblinger et al., 1989). Even though, according to Deblinger et al., (1989), 7 % of CPA victims, 21% of CSA victims, and 10% of nonabused children reported PTSD diagnosis criteria.

**CD.** In order to understand how CD and emotional problems may result from witnessing family violence, Fantuzzo et al., (1991), utilized the CTS (Straus, Gelles, & Steinmetz, 1980) to determine type and level of intrafamilial violence, Child Behavior Checklist (CBCL; Achenbach, 1991) to examine behavioral outcomes, and the Pictorial Scale of Perceived Competence (PCSA; Harter & Pike, 1984) to investigate the child's perception of acceptance and competence among a sample of preschool children. The 107 child participants were placed into 4 groups determined by the following factors; home and shelter groups who witnessed verbal and physical conflict, a home group who witnessed only witnessed verbal conflict, and a home control group. Parent reported behavioral difficulties and the child's self-report were also included. Based on the results, the researchers concluded that verbal conflict was only slightly related to mild conduct disordered behavior, while verbal and physical violence predicted clinical levels of conduct behavior problems and mild emotional difficulties. Shelter residence and witnessing verbal

and physical violence was related with clinical conduct disorder behavior, more emotional problems, and lower social competence (Fantuzzo et al., 1991). Children who live at home reported similar levels of externalizing behaviors and clinical conduct disordered behavior to children who resided in shelters (Fantuzzo et al., 1991). Additionally, both groups exhibited more severe problem behavior than children in the control group. These findings are important as they acknowledge the relationship between conflict type, current residence, and child behavioral and emotional outcomes. The results of this study are limited to nonabused, preschool children who witness intrafamilial violence (Fantuzzo et al., 1991).

Meltzer, Doos, Vostanis, Ford, and Goodman (2009) analyzed the relationship between witnessing family violence and childhood disorders in a sample of 7,865 children and their families. The data was obtained from the second national survey of the mental health of children and young people conducted by the Office for National Statistics in the UK for the Department of Health (Green, Maginnity, Meltzer, Goodman, & Ford, 2005). The results revealed that approximately 4% of the children had been exposed to family violence and witnessing severe family violence tripled the probability of the child having CD. The researchers employed a weighting process to increase the representativeness of the questionnaire which is similar to the weighting procedure used in the present study. The researchers acknowledged that about one-fourth of the sample refused to participate or could not be contacted. This was recognized as one limitation of the study because it has been speculated that parents who refuse involvement may be more likely to have children who are exposed to violence (Meltzer et al., 2009).

In a review of 23 studies including 1,069 children who witnessed family violence, Fantuzzo and Lindquist (1989) discovered that almost all of the children in the studies were residents in shelters for battered women. This poses a challenge because these samples are not representative of the general population of children who witness family violence. The current study overcomes the limitations of past research by including a clinical sample of CSA and CPA victims in the evaluation of domestic violence and child outcomes. According to Simons, Simons, and Wallace (2004), most intrafamilial violence studies have only examined either child abuse or family violence exposure in determining child outcomes. However, researchers have acknowledged that CPA and exposure to family violence co-occur (Appel & Holden, 1998) as does CSA and exposure to family violence (Bowker et al., 1988). This study is unique in that it will also investigate the co-occurrence of CSA and family violence in determining child outcomes. CPA and CSA were also substantiated as the participants were recruited from the Arkansas Children's Hospital as well as other agencies for abused children (Dykman et al., 1997). One limitation acknowledged in previous research is that most studies have used a family violence variable based on only a few items (Springer, Sheridan, Kuo, Carnes, 2007). However, this study also employed a variable weighting process in order to determine the roles of severity and type of domestic violence on child PTSD and CD. Both parent and child reported PTSD and CD were also included in the analyses in order to examine potential differences in symptoms reported.

**Comorbidity of PTSD and CD.** In the first sex-stratified investigation of the association between CD, trauma exposure, and PTSD in a large non-institutionalized adult sample, Afifi et al., (2011) found that child maltreatment (physical abuse, emotional abuse,

sexual abuse, and neglect) was related to CD. Conduct disorder and PTSD were diagnosed abiding by the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV, APA, 1994). The Alcohol Use Disorder and Associated Disabilities Interview Schedule DSM-IV was used by the interviewers and clinicians as well (Grant, Dawson, & Hasin, 2001; Ruan et al., 2008). Additionally, the results indicated that participants with CD were more likely to have been a victim of trauma than participants without CD (Afifi et al., 2011). Another interesting finding from this study was that CD symptoms occurred before the PTSD symptoms for 72% of the participants who were diagnosed with both CD and PTSD. One limitation of this study was that the CD and PTSD developmental trajectory was evaluated using age of onset data and were retrospective. Therefore, causation was impossible to determine.

Clinical studies have found that experiencing a traumatic event and being diagnosed with PTSD are more probable for individuals with CD (Afifi et al., 2011). Researchers propose that one explanation for this finding is that childhood maltreatment may result in difficult behaviors that increase the risk of developing CD and experiencing further abuse as well as experiencing more traumatic events (Afifi, 2011). Specifically, the dangerous and irresponsible behavior of individuals with CD increases the likelihood for traumatic incidents. Reebye, Moretti, Wiebe, and Lessard, (2000) discovered that 50% of children with CD indicated that they experienced trauma and of those, 17% reported symptoms that fit PTSD criteria (Reebye et al., 2000). Child participants were admitted to a clinical facility for problematic behaviors and the participants completed the DICA-R (Reich & Welner, 1988) in order to determine if CD and PTSD were present. The researchers also found that retrospective reports revealed that CD developed prior to PTSD. Clinical studies have

found that CD augments the risk of being a victim of traumatic events which subsequently increases the likelihood for developing PTSD (Afifi et al., 2011).

### **Gender Differences and Outcomes**

Researchers have come to mixed conclusions regarding gender differences in reactions to witnessing violence (Kinard, 1995, Livingston et al., 1993). Some researchers have found that gender moderates the effects of violence exposure, but have not been consistent on the same type of behavioral outcome. For example, in a study of 110 children ages 8-12, the results of the CBCL and Youth Self-Report (YSR; Achenbach & Edelbrock, 1983) completed by mothers, fathers, showed that girls who witnessed family violence reported more externalizing and internalizing behavioral problems compared to boys who witnessed family violence (Sternberg et al., 1993). However, other studies have shown that girls exhibit more internalizing behavioral problems as a result of family violence compared to boys (Holden & Ritchie, 1991). Furthermore, some researchers have concluded that witnessing parental violence affects boys and girls similarly in relation to aggressive and externalizing behaviors (Grych et al., 2000). Data from a prospective investigation of 457 youth (Lehigh Longitudinal Study) was analyzed by Moylan et al (2010) to understand the association between witnessing family violence and child behavioral outcomes. A control group of children who had not witnessed family violence was used to compare results. The results of a regression analysis yielded that gender was a significant predictor of aggressive behavior. Boys were more likely to report externalizing symptoms while girls were more likely to exhibit internalizing behaviors, however, gender did not moderate the effects of exposure to family violence and outcomes for children (Moylan et al., 2010).

Many researchers have indicated that more similarities than dissimilarities exist regarding behavioral outcomes for men and women who are victims of abuse. These findings indicate that abuse, regardless of gender, is equivalently detrimental to child abuse victims (Bley, 1996). In a survey of 110 CSA survivors, Bley (1996) conducted a MANOVA which yielded that the abused group differed significantly from the nonabused group when comparing coping skills, adjustment, and self-esteem. However, there were no differences between men and women on these factors. Therefore, the researcher concluded that men and women are similar in how they adjust to CSA.

The present study controls for gender in order to address the inconsistencies in the literature. If researchers believe that symptoms are more severe for one gender, they may neglect to propose useful treatment methods for the other. Additionally, it is problematic to assume that boys experience more aggressive behaviors than girls and that girls will always engage in internalizing behaviors following a traumatic event. This poses problems for clinicians and researchers because it affects how treatment programs are administered and created.

Researchers have advocated that there needs to be an examination of the relationship between PTSD and experiencing trauma in a representative sample of individuals with and without a diagnosis of CD (Afifi et al., 2011). This investigation is essential in order to separate the relationship between CD and experiencing trauma and PTSD because most studies have failed to acknowledge the comorbidity between PTSD and CD (Afifi, et al., 2011). Additionally, Fincham and Osborne (1993) indicated that the correlation between marital conflict and child development and behavioral difficulties in nonclinical samples are often discovered, but are reported at higher rates in clinical studies

(Fincham & Osborne, 1993). The current study involves a clinical sample of abused children in order to investigate the outcomes of witnessing family violence for this population.

### **The Current Study**

Due to the inconsistency in the literature on this topic, the goal of the present study was to investigate whether witnessing family violence (perpetrator not specified) and experiencing family violence during childhood is associated with PTSD and CD symptoms among a clinical sample of physically abused children and sexually abused children. Additionally, mothers' reports and children's reports are both used in order to address the limitation of relying solely on mothers' reports. Research has suggested that there is a lack of validity regarding separate parent and child reports as the results of parent reports and child reports have yielded different conclusions when used in the same study (Litrownik, Newton, Hunter, English, & Everson, 2003). For example, Litrownik and colleagues (2003) found that one-third of children reported witnessing a family member being hit, but only 14% of mothers reported the same (Sternberg, Lamb, & Dawud-Noursi, 1998). Additionally, Kashani, Orvaschel, Burk, and Reid (1985) utilized the DICA-C and DICA-P (Reich & Welner, 1988) instruments to compare parent and child reports of child symptoms and discovered disagreement between the parent and child reports. Specifically, parents indicated that their children had higher oppositional and attention problems whereas children reported being depressed (Kashani et al., 1985). These differences may be a result of the varying concerns of the parents and children. Parents may be more concerned with the child's behavioral problems or the parent may be unaware of the child's internalizing symptoms (depression, anxiety). Additionally, parents may believe their

children do not have anxiety and/or, a child's anxiety is not a clinical concern and therefore, parents do not report this behavior, but children do (Kashani et al., 1985). Studies such as these are profound and necessitate further investigation to resolve the problem of parent/child report discrepancies.

Social learning theorists propose that violence in childhood leads to violent behavior later (Widom, 1989). Therefore, it is predicted that witnessing family violence for both CPA and CSA victims will lead to conduct disordered behavior. Furthermore, researchers have indicated that child abuse and children's observing of FV are extremely comorbid, but are often examined separately (Shipman, Rossman, & West, 1999). Based on the previously stated research, the hypotheses include: (a) Witnessing family violence will be associated with parent reported CD, but not parent reported PTSD. (b) Witnessing family violence will be associated with child reported PTSD, but not child reported CD. (c) Gender will not significantly predict outcomes for children who have witnessed family violence. (d) CPA victims will report more incidents of family violence than CSA victims as research suggests a high comorbidity between CPA and witnessing family violence. This study will also examine how frequently each type of family violence occurs. It is expected that more severe intrafamilial violence will occur less often than less severe violent incidents.

## **CHAPTER III**

### **METHODS**

#### **Data**

The secondary data set was provided by Dr. Jeffrey Wherry, a professor at Texas Tech University. I received permission to analyze his data for the purpose of this study. The following information describes the samples and measures used to create the data set. For the purpose of this study, only some of the participants' data were used, and the participant's information is provided in the following sections.

## **Participants**

The original data set was comprised of sexually abused children, physically abused children and children who experienced both types of abuse. However, the current study will only be utilizing data from the physically abused children and sexually abused children (does not include children who were victims of both sexual and physical abuse). No child was prevented from inclusion in the study on the basis of race or gender. However, any child who had seizures or would not admit to being abused before the study was excluded. The physically abused group consisted of 46 total physically abused children including 19 boys (n=19) and 27 girls (n=27). There was a total of 123 sexually abused children (n=123) in which 81 were girls (n=81) and 42 were boys (n=42). In addition, the composition of the sample included 71% White participants (n=120) and 29% Black participants (n=49). The original data set included 205 participants (either sexually abused or physically abused) however, 36 participants were removed from the analysis due to incomplete data, thus reducing the sample to 169 total participants (n=169; see Table 3.1).

Table 3.1  
*Characteristics of the Sample (N=169)*

	<i>n</i>	%
Age		
7-13	169	100%
Gender	169	100%
Boys	61	36%
Girls	108	64%
Ethnicity	169	100%
White	120	71%
Black	49	29%
Physical abuse	46	27%
Boys	19	11%
Girls	27	16%
Sexual Abuse	123	73%
Boys	42	25%
Girls	81	48%

The child participants in the current study were ages 7-13 and were referred by personnel from inpatient and outpatient evaluation and treatment centers at Arkansas Children’s Hospital (ACH) and from local agencies assisting abused children.

### Measures

**DICA-C and DICA-P (Reich & Welner, 1988).** The PTSD symptoms and CD symptoms were derived from the child’s responses on the Diagnostic Structured Interview for Children and Adolescents (DICA-C) and the caregiver’s responses on the parallel measure for parents (DICA-P; Reich & Welner 1988). Both of the structured interviews provide DSM III-R diagnoses for children (Reich, & Welner, 1988).

Welner, Reich, Herjanic, Jung, & Amado (1987) conducted a validity study of the DICA-C and interviewed 27 psychiatric inpatients, 7- to 17-years-old. In order to validate the instrument, the researchers compared the DICA-C diagnoses with the hospital

discharge diagnoses to the DICA-C and found that for 81.5% of the cases, the clinicians agreed with the DICA-C diagnoses. Additionally, Welner et al. (1987) interviewed 84 outpatients and found moderate parent-child agreement for the DICA-C and DICA-P instruments in the majority of DSM-III categories. Other studies have documented the high reliability and validity of the DICA-P and DICA-C instruments (Reich & Welner, 1997; Ezpeleta, De la Osa, Domenech, Navarro, & Losilla, 1997).

**ADI.** The Abuse Dimensions Inventory is used for rating dimensions of abuse (Chaffin Wherry, Newlin, Crutchfield, & Dykman, 1997). The ADI is used after allegations of abuse have been completed, and it has been documented that the abuse event did in fact occur. Items include abuse characteristics ranked for severity by mental health professionals who were specialized in child abuse. The items were ranked from least severe to most severe. For example, for sexually abused victims, the least severe act is; *1) sexually suggestive talk, hugs or kisses*, and the most severe act is; *12) ritual or satanic abuse or sexualized torture* (Chaffin et al., 1997). For physical abuse victims, there are 10 items ranked in order of severity with one being the least severe and 10 being the most severe. Sample items include; *1) pushing or shaking*, and *10) sadistic injury or torture* (Chaffin et al., 1997). Interrater agreement was determined based on 25 interviews that were recorded via audiotape conducted by four raters. The kappa for the ADI was .80. Repeated ANOVAS were employed for each scale which yielded reliability coefficients ranging from .96 to .99 for all raters. The reliability coefficient mean for the sexual abuse scale was .97, and for the physical abuse scale it was .96 (Chaffin et al., 1997).

**The Health Resiliency Intervention for Violence Exposure (THRIVE) Student Screening Questionnaire.** The current study only utilized six items from the longer Recent

Exposure to Violence Scale adapted by Stein et al. (2003). Child participants completed The Student Screening Questionnaire in which they were asked to rate the frequency of certain observed or experienced violent actions in their family environment. Researchers have found moderate to high Cronbach's alphas ranging from .67 to .86 during (Goodkind, 2004). Internal consistency was calculated for all six items from the current study and yielded a Cronbach's alpha of .97.

## **CHAPTER IV**

## RESULTS

In order to adjust for sampling methods and the unequal probabilities of cases being selected in the sample, each item related to witnessing family violence was weighted, using its standard deviation from the mean (Humphrey, 2015). Thereafter, the newly weighted family violence items were added together in order to determine the total family violence variable. This allows for better representation of the true population from which the sample was drawn. Thus, the weighted variables were utilized in the current study in order to accurately represent the occurrence of family violence in the clinical population of sexually or physically abused children from which the sample was drawn.

Frequency checks of the six child-witnessed family violence variables revealed that the more severe acts of violence were not as often experienced as were the less severe acts (see Table 4.1). However, 65% of the children reported witnessing parents arguing, and almost half of the sample (48%) witnessed physical fighting between family members. The results did not fully confirm the prediction that more severe events would occur less. For example, physical fighting (48% of the sample) was more prevalent among the whole sample of physically abused children and sexually abused children than was witnessing family members smash objects (45%). Twenty-seven percent of the sample witnessed beatings with serious injury between family members. Additionally, 17% reported that family members had been threatened with a weapon by another family member, and 6% indicated that they had witnessed family members being assaulted with a weapon.

Table 4.1  
*Frequency of Family Violence Witnessed*

	Participants 169	
	<i>n</i>	%
Arguing	110	65%
Physical Violence	81	48%
Smashing Objects	76	45%
Beating with Serious Injury	46	27%
Threats of using a Weapon	29	17%
Assault with Weapon	10	6%

The results of an independent samples t-test revealed that there is no significant difference in the means of family violence events witnessed between CSA and CPA victims.

### **Consequences of Witnessing Family Violence for the Whole Sample**

**Parent-reported symptoms.** When controlling for abuse status and child gender for the whole sample, witnessing family violence was a significant predictor of parent reported child PTSD symptoms ( $\beta = .195, p < .05$ ). Abuse status was significant ( $\beta = 1.135, p > .05$ ), but child gender was not ( $\beta = .650, p < .05$ ). The predictors accounted for a total of 26% of the variance in parent reported PTSD symptoms (see Table 4.2) The R for regression was significantly different from zero,  $F(3) = 4.892, p < .05$ . A follow up t-test revealed that physically abused children exhibited more parent reported PTSD symptoms ( $M = 8.9$ ) than did CSA victims ( $M = 6.3$ ). This relationship was significant,  $t(148) = -2.8, p > .05$  (see Table 4.3). Additionally, the results of a power analysis revealed an 85% chance of detecting an effect of witnessing family violence on parent reported PTSD symptoms. This analysis was based on Cohen's (1988) criteria for a power analysis.

Table 4.2

*Predictors of Parent-Reported PTSD for the Whole Sample (N=169)*

Variable	<i>B</i>	<i>SE B</i>	$\beta$
Gender	0.068	0.711	0.65
Witnessing FV*	0.185	0.075	0.195
Abuse Status*	0.149	0.563	1.134

*Note:*  $R^2 = 0.071$

Table 4.3  
Group Differences on PTSD and Witnessing Family Violence ( $N = 169$ )

	Physical Abuse N=46	Sexual Abuse N=123
Variable	<i>Mean(SD)</i>	<i>Mean(SD)</i>
PPTSD*	8.9(3.8)	6.3(4.6)
CPTSD	6.7(4.5)	8.2(4.0)
Witnessing FV	2.4(1.9)	1.7(1.7)

*Note:* \* $p < .05$ . \*\* $p < .01$

When controlling for gender of the child, and abuse status for the whole sample, witnessing family violence remained a significant predictor of parent reported CD symptoms ( $\beta = .118$ ,  $p < .05$ ). Gender was also significant ( $\beta = -2.389$ ,  $p < .000$ ); abuse status was not ( $p > .05$ ; see Table 4.4).

Table 4.4  
Predictors of DICA-P Conduct Disorder for the Whole Sample ( $N=169$ )

Variable	<i>B</i>	<i>SE B</i>	$\beta$
Gender*	-0.413	0.290	1.778
Witnessing FV*	0.251	0.030	0.118
Abuse Status	0.073	0.277	0.248

*Note:*  $R^2 = 0.259$

*Note:* \* $p < .05$ . \*\* $p < .01$

**Child-reported symptoms.** Child reported PTSD and CD symptoms were not significantly predicted by witnessing family violence ( $p > .05$ ).

## **CSA and Witnessing Family Violence**

A multiple regression also was conducted to assess the relationship between CSA victims who witness family violence and PTSD symptoms (as reported by both child and parent). The results revealed that for CSA victims, witnessing family violence was not a significant predictor of PTSD symptoms as reported by the DICA-P or the DICA-C ( $p > .05$ ). Gender and severity of abuse were controlled for in the analyses and were also nonsignificant in predicting PTSD symptoms, regardless of the informant ( $p > .05$ ).

All three predictors (severity of abuse, gender, and witnessing family violence) accounted for 26% of the variance in parent reported CD (see Table 4.5). The R for regression was significantly different from zero,  $F(3)=16.492$ ,  $p < .000$ . The results of a multiple regression analysis showed that for CSA victims, witnessing family violence predicted parent reported child CD symptoms according to the DICA-P ( $p < .01$ ,  $\beta = .110$ ) when controlling for severity of sexual abuse ( $p > .05$ ) and gender. The analysis also revealed that gender was a significant predictor of CD as well ( $p = .000$ ,  $\beta = -1.991$ ) with boys having a higher mean score than girls (boys;  $M = 3.59$ , girls;  $M = 1.4$ ,  $t(143) = 6.031$ ; see Table 4.6).

Table 4.5  
*Predictors of Parent-Reported CD for CSA Victims*

<i>Variable</i>	<i>B</i>	<i>SE B</i>	<i>β</i>
Gender**	0.402	0.367	1.991
Abuse Severity	0.07	0.059	0.056
Witnessing FV*	0.228	0.036	0.11

$R^2 = .260^{**}$

Note: \* $p < .05$ . \*\* $p < .01$

Table 4.6

*Gender Differences for Sexually Abused Children on Parent Reported CD (N=123)*

	Boys N=46	Girls N=123
<i>Variable</i>	<i>Mean(SD)</i>	<i>Mean(SD)</i>
CD*	3.59 (2.4)	1.1 (1.5)

Note: \* $p < .05$  \*\* $p < .01$

### **CPA and Witnessing Family Violence**

Standard multiple regression analysis was used to determine if being a victim of child physical abuse and witnessing domestic violence predicts PTSD as reported by the child's DICA-C responses and the parent's responses on the DICA-P. CPA and witnessing family violence did not predict child reported PTSD, but did predict PTSD as reported by the child's parent. Specifically, the R for regression was significantly different from 0,  $F(3, 69) = 3.12, p < .01$ . Altogether, 35% of the variability in PTSD was predicted by witnessing family violence, gender, and severity of physical abuse as indicated by responses on the ADI (Chaffin et al., 1997). For physically abused children, the only independent variable that provided unique significant contribution to the prediction of PTSD was witnessing family violence. Therefore, being a victim of child physical abuse and witnessing family violence predicted parent reported child PTSD symptoms ( $\beta = .238$ ,

$p < .05$ ) when controlling for the child's gender ( $\beta = 1.941, p > .05$ ), and severity of physical abuse ( $\beta = .273, p > .05$ ). For physically abused children, witnessing family violence did not significantly predict CD symptoms, regardless of the informant ( $p > .05$ ).

### **Comparison of Parent and Child Reports**

In order to compare parent and child reported PTSD and CD symptoms, two correlation analyses were conducted. The results revealed a significant positive correlation between child reported CD and parent reported CD  $r(167) = .403, p < .00$ . There was no significant correlation between parent reported child PTSD and child reported PTSD  $r(167) = .061, p > .05$ . In order to compare reports and determine the level of agreement on CD and PTSD symptoms, a crosstabs analysis using Cohen's kappa was conducted. The results of the interrater analysis for the DICA-C and DICA-P on PTSD symptoms were Kappa = 0.010 ( $p > 0.05$ ). A moderate Kappa ranges from 0.40 to 0.59, 0.60 to 0.79 indicates a large Kappa, and a Kappa of 0.80 shows outstanding agreement between reports (Landis & Koch, 1977). This measure of agreement is nonsignificant and abiding by the criteria above; there is only slight agreement between the two reports.

### **Summary**

In order to determine the relationship between CSA, family violence, and parent reported child CD, a regression was conducted in which, again, gender was the most severe type of CSA were controlled. The results showed that for CSA victims, witnessing family violence predicted CD symptoms. Interestingly, the analysis also indicated that gender was a significant predictor of CD as well. An independent samples t-test was conducted to determine who engages in more CD behaviors as a result of CSA and witnessing family violence. Gender was significant in predicting CD behaviors, with boys having a higher mean score than girls.

The second regression resulted in a nonsignificant relationship between CSA, witnessing family violence, and total parent and self-reported child PTSD symptoms, when controlling for gender and severity of abuse, which were also nonsignificant in predicting PTSD symptoms. This is contrary to the vast majority of research that has found CSA victims to be at a high risk for developing PTSD (Kendall-Tackett et al., 1993). For example, in a review conducted by Kendall-Tackett et al., (1993), it was discovered that PTSD and behavior problems were among the most common consequences; however, not one symptom defined a majority of sexually abused boys and girls. PTSD symptoms were identified as the only symptoms exhibited more often by sexually abused children than by nonabused children in clinical settings (Kendall-Tackett et al., 1993).

Separate analyses were conducted for victims of CPA and victims of CSA in order to understand the unique relationship between type of abuse, family violence, and child outcomes. The first regression indicated that being a victim of CPA and witnessing family violence predicted parent reported child PTSD symptoms, when controlling for child's gender and most severe type of physical abuse. Gender and severity of abuse did not predict PTSD symptoms for physically abused children. Witnessing family violence alone predicted PTSD symptoms as reported by the parent, not the child.

## **CHAPTER V**

### **DISCUSSION**

This study added to the literature in numerous ways, as it compared parent and child reports of child behavior, provided insight into the possible discrepancies of parent and child reports, utilized a weighted family violence variable to ensure that the family violence

witnessed in the current sample reflected its occurrence in the population, and also assessed for the possible “double whammy” effect in a sample of children who had been either sexually or physically abused. The results reveal that parent and child reported PTSD symptoms are dissimilar on the DICA-C and DICA-P diagnostic instrument. This is consistent with the hypothesis and previous literature regarding the discrepancies of parent and child reported behavioral and mental health problems. Conversely, the findings do not corroborate previous studies regarding the reason for the incongruity in parent reported child PTSD and child reported PTSD. Researchers have expected children to over-report their PTSD symptoms and parents to underreport their children’s PTSD symptoms, which is not evidenced in the current study. Furthermore, researchers have attributed this to the possibility that parents are unaware of their child’s anxiety, avoidance symptoms, nightmares, psychological numbness, etc. as most PTSD symptoms are experienced internally and not outwardly exhibited (Hughes, 1988). However, in this sample, a comparison of the DICA-P and DICA- C revealed that a higher percentage of parent reports indicated that their child met PTSD criteria than did the children’s report. An explanation for this could be that the parents over-reported their child’s hyperarousal symptoms, and the children may not have the cognitive capacity to reflect on their emotions and explain their re-experiencing and avoidance symptoms (Hughes, 1988). Therefore, further research is needed in order to determine who is a more accurate reporter of child PTSD symptoms. In regards to CD, Hughes (1988) suggested that parents are the most accurate reporter of their young child’s externalizing behavior, as children may not be able to articulate and report their own behaviors. The results of the current study revealed a significant correlation between child reported CD and parent reported CD, which is consistent with

Hughes' (1988) proclamation that older children (ages 6-12) are more accurate at reporting their aggressive behaviors than are younger children. The children in this study were ages 7-13. Therefore, the current study substantiated the reliability of mother reported CD symptoms; however, the analyses revealed that witnessing family violence only significantly predicted mother reported CD symptoms, not child reported CD symptoms.

Based on the frequency analysis of family violence incidents, it is evident that this population of children is at extreme risk for being a victim of violence as well as witnessing intrafamilial violence. The current study also attempted to overcome the limitation of previous studies that failed to examine child abuse when addressing the effects of witnessing family violence. For example, Fantuzzo and Lindquist (1989) discovered that 75% of the articles they analyzed did not investigate abuse status. Additionally, this study is unique in that it also analyzed the outcomes for sexual abuse victims who witnessed family violence, as previous studies have mainly focused on the "double-whammy" effect of physical abuse and witnessing family violence (Moylan et al., 2010.; Pelcovitz et al., 1994; O'Keefe, 1994). Due to the evidence that double-exposure to family violence is significantly related to behavioral and emotional problems in children, the current study is important as it augments the literature (O'Keefe, 1994; Moylan et al., 2010). The results revealed that CPA victims were not more likely to witness family violence when compared to CSA victims. Therefore, future studies should continue to include CSA victims when studying the dual effect of witnessing family violence and being abused. As evidenced in this study, this population of sexually abused children is at risk for CD.

Consistent with research conducted by Livingston et al., (1993), but contrary to the hypothesis, sexually abused boys were found to be more aggressive and exhibit more CD

symptoms than sexually abused girls. In their review of 23 studies, Fantuzzo and Lindquist (1989) discovered a higher rate of externalizing symptoms in boys who witnessed family violence compared to girls who were also exposed to family violence. Additionally, the results of a cross-sectional study yielded that boys who had witnessed family violence and were currently residing in a shelter were more aggressive than girls who also were residing in a shelter and had witnessed family violence as well as the control group who did not witness family violence (Hughes & Barad, 1983). The children in this study were similar ages to the participants in the present study (ages 3-13). However, other studies have concluded that witnessing parental violence affects boys and girls similarly in relation to aggressive and externalizing behaviors (Grych et al., 2000; Sternberg et al., 2006). The research suggests that boys, whether victims of physical abuse or not, engage in more aggressive behaviors than girls (Dykman et al., 1997).

Despite the belief that younger children, specifically ages 8 and younger, are more likely than older children to witness intrafamilial violence (Carlson, 2000), the older participants in this study also indicated witnessing family violence. In a review of numerous studies, Graham-Bermann (2002) found that school-age children who witness domestic violence are at a greater risk for negative outcomes such as PTSD and externalizing behavior, compared to non-exposed children. The results of the current study further confirm that school age children are at risk for experiencing behavioral and emotional problems including PTSD and CD and these children should not be overlooked by clinicians and researchers. However, fewer studies have been conducted concerning the effects of witnessing family violence on preschool age children, thus further research is warranted (Graham-Bermann, 2002).

Understanding the factors related to the co-occurrence of family violence and child abuse allows for the development of successful intervention and prevention programs, thus potentially reducing the risk of perpetuating the intergenerational transmission of child abuse and negative outcomes. These findings add to the literature on the outcomes of witnessing family violence.

### **Cost of Abuse and Witnessing Family Violence**

Every year, child maltreatment and family violence is estimated to cost around \$124 billion, according to the Centers for Disease Control and Prevention (Fang, Brown, Florence, & Mercy, 2012). Additionally, it is estimated that domestic violence alone costs the U.S \$8.3 billion per year (Pearl, 2013). These costs include \$5.8 billion in medical costs and \$2.5 billion in the loss of work productivity (Pearl, 2013). Thus, research assessing the relationship of CSA, CPA (Dykman et al., 1997), family violence exposure and outcomes (Kitzmann et al., 2003) is imperative due to the substantial cost of violence to society and the destructive outcomes for the victims. Research has demonstrated that the effects of CSA can be severe and devastating on an individual's psychological, emotional, and physical wellbeing (Hinson et al., 2002). These emotional and behavioral difficulties can lead to significant disruption in children's normal development and often have a lasting impact, leading to dysfunction and distress well into adulthood. The consequences of CSA are not limited to victims, but also affect society as a whole. In terms of annual direct and indirect costs to the United States, the U.S. Department of Justice (1996) estimated that each year CSA in America costs the nation \$23 billion. Additionally, studies have reaffirmed a connection between child physical abuse, externalizing behaviors, and juvenile delinquency. Researchers recently

have determined that abuse (CSA or CPA) and witnessing family violence also may lead to internalizing problems and PTSD symptoms. (McCloskey & Walker, 2000; Shipman et al., 1999).

According to the Rand Cooperation (2008), untreated PTSD can have extremely detrimental consequences including increased risk for developing other psychological health problems and considering suicide. Additionally, other costs of PTSD include more physical health problems and later intimate relationship problems (Rand, 2008). There are also financial burdens associated with a PTSD diagnoses including medical costs associated with the mental health and cognitive difficulties (Rand, 2008). It is acknowledged that the long-term individual and societal costs of PTSD extend beyond the direct medical costs. The long-term costs include reduced quality of life, strain on families, and suicide (Rand, 2008). This information is important as the results of the present study showed that children who witnessed family violence and CPA victims are at risk for experiencing PTSD, as reported by parents. Additionally, other studies have found that CSA victims are at risk of developing PTSD symptoms (Wolfe, Gentile, & Wolfe, 1989; Kendall-Tackett et al., 1993) although this wasn't substantiated in the current study. It is possible that the association between CSA and PTSD was not found because of the small sample size and small effect size in the current study. It is also likely that parents may believe their children do not have anxiety or experience hyperarousal, and/or, a child's anxiety is not a clinical concern. Therefore, parents may not report this behavior (Kashani et al., 1985). Additionally, Kaminer, Seedat, and Stein (2005) have found that children may express post-traumatic anxiety behaviors through increased hyperactivity, which may be inaccurately reported by parents as attention deficit

hyperactivity disorder (ADHD is defined by the DSM-IV-R, 1994, as a constant pattern of inattention and/or hyperactivity-impulsivity that is more often displayed and more severe than is normally observed in individuals at a similar level of development). The CSA victims in the current study may not be at an age of which they are able to articulate anxiety, hyperarousal, and reexperiencing symptoms.

In a study of four communities assessing the cost of CD, Foster and Jones (2005) found that children with CD incurred per individual spending of over \$70,000 per year, which exceeded children with oppositional defiant disorder (ODD is defined by the DSM-IV-R, 1994, as a recurrent pattern of developmentally inappropriate, defiant, and disobedient behavior toward authority figures), children with elevated symptoms, and children with other combined disorders (Foster & Jones, 2005). The cost of services were derived from the following categories; general health, psychiatric, outpatient mental health, juvenile justice, and school. Parent reports indicated that a large percentage of youth had utilized services and were involved in the juvenile justice system (Fosters & Jones, 2005). Findings such as these are important as it was evidenced in the current study that CD is a consequence for physically or sexually abused children who witness family violence. Furthermore, understanding the substantial cost of CD, PTSD, child maltreatment, and family violence makes it apparent that this is a serious problem for victims as well as society as a whole.

### **Limitations**

The current study utilized a secondary data set. The data were evaluated to determine what analyses were possible using the available variables. Future studies should consider implementing a longitudinal design to understand potential causal

relationships between witnessing family violence, CD and PTSD amongst victims of CPA and CSA. One limitation of this study is the fact that it may not have assessed the true incidence rate of domestic violence. According to Meltzer et al., (2009), domestic violence is a sensitive topic and is usually underreported.

Although the study cannot establish causality, the researcher addressed possible spuriousness by statistically controlling for gender and severity of abuse. The study has contributed to the literature on child abuse and adverse behavioral outcomes, as the findings demonstrated associations between witnessing family violence, abuse, and behavioral and mental health outcomes.

The current study was unable to determine what coping factors were used by children who did not exhibit CD or PTSD symptoms. Understanding these resilient behaviors is necessary for the development of successful treatment and intervention programs. Another limitation of the current study is that it used a referred sample of sexually abused and/or physically abused children who were seeking treatment. Therefore, the findings may not be applicable to community samples of children who have witnessed family violence and/or victims of CPA and/or CSA and who are not seeking treatment.

Another limitation of the current study is that it is possible that the effect sizes were small enough to necessitate a larger sample. Specifically, a post hoc power analysis revealed that the current study had a 90% chance of detecting a medium effect size (Cohen, 1992) of .5 and a 99% chance of detecting a large effect size between CPA victims and CSA victims when analyzing mean differences on witnessing FV (significant at 5% level, two-tailed).

Despite its limitations, the current study augments the literature as it acknowledges the importance of witnessing family violence and not solely being a victim of direct abuse in the development of child mental health and behavioral problems.

### **Future Directions**

Due to the concern of overreliance on mothers' reports, researchers recommend acquiring behavior ratings from several sources, including; shelter employees, family members, teachers, and peers (Fantuzzo & Lindquist, 1989; Apell & Holden, 1998). Researchers have acknowledged that the mother's reports may be inaccurate depending on her current psychological state and, therefore, should not be the only source of information regarding their child's behaviors (Overlien, 2010). Additionally, researchers have discovered that child witnesses of FV differ from parents on the problems they report to clinicians and researchers (Hughes, Parkinson, & Vargo, 1989). The study serves as motivation for future researchers to investigate the validity and accuracy of parent and child reports of PTSD and CD. Specifically, which report is a more accurate depiction of the behavioral and mental health consequences of witnessing family violence for children? Due to the nature of this dataset, these questions could not be investigated; however, the findings from this study should encourage other researchers to examine reporter discrepancies. Understanding the accuracy of parent and child reported symptomatology is essential for correctly diagnosing children who are victims and witnesses of intrafamilial violence. Observational methods may also be useful for examining children's behaviors. Although researchers have explained the difficulty in acquiring participation from the father, gathering information on father-child interaction would

provide valuable insight into the child's behavioral outcomes (Fantuzzo & Lindquist, 1989).

Overlien (2010) argued that the majority of the research is quantitative, and she suggests that it is essential to conduct more qualitative studies. These studies elicit information directly from the child, which provides invaluable insight into the nature of their problems. Additionally, qualitative methods would allow the participant to elaborate on resiliency factors that helped them overcome their adversity. This information is imperative for researchers and clinicians in the development of effective prevention and intervention programs (Overlien, 2010).

The majority of the reviewed investigations used samples recruited from a battered women's shelter. Fantuzzo and Lindquist (1989) argued that the results of these studies are not generalizable to the universal population of children who witness family violence, nor are they applicable to children exposed to family violence whose mothers do not leave. Future studies should compare shelter residents to non-shelter children who witnessed family violence in order to determine if the behavioral outcomes exhibited by these children are a result of witnessing family violence and not a consequence of the "shelter effect" (Fantuzzo & Lindquist, 1989).

Another suggestion provided by Sternberg, Baradaran, Abbott, Lamb, and Guterman, (2006) is to examine gender as a potential moderator of the relationship between witnessing family violence and outcomes as the literature has provided contradictory findings. The lack of consistency warrants further investigation, as it is imperative to understand for whom and under what circumstances conduct disordered behavior occurs as a result of family violence exposure.

Research is needed to analyze the intersectionality of age and gender as it relates to witnessing and/or experiencing family violence and associated outcomes. According to an application of social learning theory to witnessing and/or experiencing FV, it is expected that all children, regardless of age or gender, will experience aggressive or conduct disordered behavior. However, based on the aforementioned research, it is apparent that this relationship is altered by various sociodemographics that must be considered. For example, the results of Carlson's (1991) investigation showed that adolescent boys who witnessed FV were significantly more likely to condone violence than were girls who witnessed FV. Researchers have acknowledged that, in general, girls exhibit more internalizing behaviors and boys exhibit more externalizing behaviors following the observation of family violence (Carlson, 1991; Stagg, Wills, & Howell, 1989). However, it is important to acknowledge that this trend does not hold true for all children. Some studies, for example, have evidenced that girls also engage in conduct disordered behaviors, especially when they are older (Spaccarelli, Sandler, & Howell, 1994). In contrast, Hughes (1988) discovered that preschool aged children who witnessed FV had more behavioral problems than children in other age groups who also witnessed FV. The research is essential due to the documented evidence that witnessing family violence leads to detrimental behavioral consequences for children (Fantuzzo & Lindquist, 1989; Rosenbaum and O'Leary, 1981).

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