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Childhood Experiences and Domestic Violence: The Role that Interpartner Violence Plays in Relationship Functioning and Parenting Behaviors in Adulthood.

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CHILDHOOD EXPERIENCES AND DOMESTIC VIOLENCE: THE ROLE THAT INTERPARTNER VIOLENCE PLAYS IN RELATIONSHIP FUNCTIONING AND PARENTING BEHAVIORS IN ADULTHOOD

by

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ABSTRACT

It is estimated that approximately 25% of women and 7.6% of men report experiencing violence from their romantic partner during their lifetime. Additionally, in households where interpartner violence occurs, there are between 3.3 and 10 million children in the United States alone. It is important to understand the cycle of domestic violence that can occur, as it can inform us about expected outcomes across time. This study examined mothers' childhood exposure to their own parents' domestic violence. It was hypothesized that childhood exposure to domestic violence would be related to unhealthy intimate relationships and to the development of maladaptive parenting behaviors during adulthood. These experiences also were hypothesized to be related to the behaviors of the mothers' young children. For this study, 133 mothers with children who ranged in age from 1½- to 5-years participated. Results indicated that exposure to domestic violence in childhood was related significantly to the likelihood of experiencing interpartner violence later in life. Also, having a personal history of interpartner violence in adulthood was related to higher rates of internalizing and externalizing behavior problems in mothers' young children. Further, findings demonstrated a relationship between mothers' parenting behaviors and behavior problems in their children. Future research is needed to investigate further the mediators and moderators in the relationship between mothers' childhood exposure to domestic violence and behavior problems in their young children to broaden the literature on this topic. This information may be critical for treatment planning and intervention development for families who experience domestic violence.

Keywords: interpartner violence, domestic violence, child behaviors, parenting

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CHAPTER ONE: INTRODUCTION

Each year, up to 10 million children are exposed to or experience violence between their parents (Carlson, 1984; Chemtob & Carlson, 2004; Nguyen & Larson, 2012; Straus, 1992). Domestic violence is defined by the American Psychological Association (APA) Task Force on Violence and the Family as a "pattern of abusive behaviors including a wide range of physical, sexual and psychological mistreatment used by one person in an intimate relationship with another to gain power unfairly or maintain that person's misuse of power, control and authority" (as cited in Martin, 2002, p. 7). In the typical usage of the term, domestic violence usually is perceived and understood as the violence that exists between adults who share a romantically intimate relationship (Fantuzzo & Mohr, 1999). The former definition will be used when referring to domestic violence in this paper, as it encompasses the major factors of interest for this study.

When discussing domestic violence, women tend to be subject to more domestic violence than men. In fact, it is estimated that approximately 25% of women and 7.6% of men report being subject to violence from their romantic partners during their lifetime (Cronholm, Fogart, Ambuel, & Leonard Harrison, 2011). Carlson (1984) and Straus (1992) both explained that, in households where domestic violence occurs, there are between 3.3 to 10 million children in the United States alone (as cited in Chemtob & Carlson, 2004, as cited in Nguyen & Larson, 2012). Thus, many adults have been affected by the childhood experience of domestic violence in their families of origin, prompting them to potentially have after effects in their adult relationships.

As a result, it is important to understand the cycle of domestic violence that can occur in families, as it can inform what outcomes may be expected across generations (Buckley, Holt, & Whelan, 2007; Ciccetti & Toth, 1995; Cronholm et al., 2011). When attempting to research the

impact of parents' domestic violence on children, most research has focused on the outcomes of children in homes where domestic violence has occurred, rather than examining current experiences of parents who have a history of childhood exposure to domestic violence. Further, very few longitudinal studies have been conducted on children who were exposed to domestic violence (Evans, Davies, & DiLillo, 2008; Herrenkohl, Sousa, Tajima, Herrenkohl, & Moylan, 2008). Nonetheless, research suggested that children who were exposed to domestic violence at an early age demonstrate internalizing and externalizing behavior problems in adolescence, possibly prompting challenges for their adulthood (Buckley et al., 2007; Margolin, Gordis, Medina, & Oliver, 2003; McIntosh, 2003).

For example, Sousa and colleagues (2011) conducted a study on the effects of exposure to both abuse and domestic violence from childhood through adolescence. In this study, both child abuse and/or domestic violence exposure contributed to antisocial behavior in adolescence. Silvern, Karyl, Waelde, Hodges, Starek, Heidt, and Min (1995) also found that exposure to domestic violence in childhood contributes largely to problems for these children. Their findings suggested that exposure to domestic violence during childhood has the potential to result in trauma-related effects that are indistinguishable from the effects of child abuse. As research on the long-term effects of domestic violence exposure on children is in its infancy (Evans et al., 2008), there still is much to be explored regarding adult outcomes of childhood exposure to domestic violence.

Consequently, this study was an effort to derive outcomes related to childhood exposure to domestic violence in the context of adult relationships and parenting behaviors. In particular, this study was focused on the retrospective experiences of mothers who had been exposed during their own childhoods to domestic violence in their families of origin. As already noted,

retrospective examinations of childhood exposure to domestic violence is underrepresented in the literature, even though research suggested that such childhood exposure has ill effects on a variety of adult outcomes. It was anticipated that childhood exposure to domestic violence would be related to an increase in individuals' likelihood of experiencing interpartner violence in adult relationships as well as maladaptive parenting with young children. It also was expected that these problematic adult characteristics would be related to emotional and behavioral problems for young children.

Childhood Exposure to Domestic Violence and Child Outcomes

In studying the effects of domestic violence on children, Chemtob and Carlson (2004) found that 92% of children reported witnessing verbal abuse, 84% reported witnessing physical abuse, 64% recalled police intervention, 60% endured physical abuse themselves, 56% reported intervening with their parents themselves, and 4% reported enduring sexual abuse. This information suggested that the degree to which children in domestically violent households witnessed and became involved in such interactions themselves was quite high. In a more recent review, Buckley, Holt, and Whelan (2007) explained that a small proportion of children living in a home environment where domestic violence was present left that environment untainted or unscathed by their experiences. Nonetheless, Fantuzzo and Mohr (1999) explained that children often did not escape the violence occurring in their homes and were not watching the violence passively from the sidelines. In other words, children were involved in the abusive family system at one level or another.

Research on exposure to domestic violence in childhood suggested clearly that domestic violence has negative effects on children (Brody, Arias, & Fincham, 1996; Carlson, 1984; Chemtob & Carlson, 2004; Evans et al., 2008; Fantuzzo & Mohr, 1999; Jouriles, 2008; Martin,

2002; Straus, 1992). Children who were exposed to domestic violence were adjusted more poorly than their peers who had not had such exposure, and they did not differ from those peers who had experienced both exposure to domestic violence and physical abuse (Kitzmann, Gaylord, Holt, & Kenny, 2003). For example, Levendosky, Huth-Bocks, and Semel (2002) explained that the impact of domestic violence on young children was just as significant as experiencing child abuse. In other words, young children who saw their mothers being abused developed the same symptoms of trauma that would be expected if the children had been abused themselves. Herrenkohl and colleagues (2008) also reported that childhood exposure to domestic violence resulted largely in the same developmental consequences as the experience of child abuse. Some of the outcomes mentioned in their review include school drop-out, teenage pregnancy, depression, attempted suicide, delinquency, violence, and substance use (Herrenkohl et al., 2008). They further explained that, although not well documented, children exposed to domestic violence had above average rates of psychological, emotional, and cognitive impairments (see also Fantuzzo, Boruch, Beriama, Atkins, & Marcus, 1997) as well as long-term developmental issues (e.g., depression, anxiety, low self-esteem, school failure, physical aggression).

Nonetheless, there likely will be great variability in children's responses to the domestic violence that they witness, with family dynamics playing a role in children's ultimate adjustment. For example, Hilton (1992) reported that some children took sides, with some siding with the parent who was perpetrating the violence and some siding with the parent who was subject to the violence. Children may develop internalizing behavior problems or both internalizing and externalizing behavior problems that may be a direct response to increased levels of threat and/or fear or guilt in their households (DeBoard-Lucas & Grych, 2011; Evans et

al, 2008; Fallin, 2000; O'Keefe, 1994). Also, these children were more likely to display risky sexual behavior, to commit sexual assault, and to exhibit violence toward their peers (Chronholm et al., 2011). Overall, however, outcomes for children who were exposed to domestic violence include difficulties with emotional and mental health, future relationships, and physical safety in some cases (Buckley et al., 2007).

Exposure to Domestic Violence and Adult Outcomes

Much of the literature on childhood exposure to domestic violence tends to present social, emotional, and behavioral outcomes for later adulthood in a general way. For this reason, many of the outcomes that will occur later in adulthood (e.g., unhealthy interpartner relationships, poor parenting) deserved further study. The information provided thus far clearly implied that being raised in an abusive home situation can have a significant effect on the process of development and the idiosyncratic capacity of any child (Buckley et al., 2007; Katz, 2007; McIntosh, 2003). The effects of domestic violence exposure then can continue through to adulthood (Buckley et al., 2007; Margolin, Gordis, Medina, & Oliver, 2003; McIntosh, 2003) and can play a dramatic role in the circular process that underlies related adversity and violence (Buckley et al., 2007; Ciccetti & Toth, 1995). Cronholm and colleagues (2011) explained that children who were raised in highly dysfunctional family systems displayed greater than average mortality rates as well as increased morbidity as adults. For example, based on Chemtob and Carlson's (2004) findings, 48% of the mothers in that sample reported that they were abused sexually in childhood and had experienced physical abuse in their subsequent romantic intimate relationships.

Expanding on this finding further, Afifi, MacMillan, Boyle, Taillieu, Cheung, and Sareen (2014) classified interpartner violence as a type of child abuse. Similar to other findings noted here, their findings suggested that children who experienced physical abuse, sexual abuse, and/or

exposure to domestic violence were likely to suffer from some type of psychological disorder (e.g., drug abuse/dependence) as well as suicidal ideation and suicidal attempts later in life. Also, referring to the significance of exposure to domestic violence, Jirapramukpitak and Harpham (2010) found that being exposed to domestic violence and experiencing physical abuse in childhood increased individuals' likelihood of interpartner violence involvement in adulthood. Although the combination of domestic violence and child abuse resulted in the highest incidences of re-victimization, individuals who experienced either exposure to domestic violence or childhood physical abuse also were highly likely to report experiencing interpartner violence in adulthood. Thus, each form of violence was significantly predictive of interpartner violence. Findings such as these suggested that experiencing domestic violence during childhood can be related to later relationship difficulties in adulthood.

Exposure to Domestic Violence: The Transgenerational Cycle

Based on an understanding that witnessing domestic violence can result in a cycle of domestic violence that may span generations, it was important to determine what might be promoting this transgenerational phenomenon. Many researchers posited that children learn how to resolve family conflicts early in life through modeling (Bandura, Ross, & Ross, 1963; Graham-Bermann & Hughes, 1998). In other words, they observed interactions between their parents (Bell & Naugle, 2008), suggesting that witnessing domestically violent situations or being violated physically as children would be related to poor adult relationship outcomes (e.g., Breslin, Riggs, O'Leary, & Arias, 1990; Jackson, 1999; Lewis & Fremouw, 2001).

Further, when children were raised in domestically violent family situations where such behaviors were all they knew, it may be likely that many youth would endorse physical and/or verbal aggression from perpetrators as being normal responses to undesirable acts (although

some children may endorse these behaviors as negative). For example, Astor (1994) found that children who were more aggressive were more likely to approve of interpartner violence when the perpetrator was provoked. These children also justified their perceptions by focusing on the psychological harm that the perpetrator may have experienced when provoked (see also DeBoard-Lucas & Grych, 2011). Levendosky, Lynch, and Graham-Bermann (2000) also found that, in situations where children witnessed mothers being psychologically abused, children would take on traits of the perpetrator when interacting with their mothers. Further, Carlson (1991) found that adolescent males were more likely to use and approve of violence toward others but that females had a greater tendency to run away and to do so more often. DeBoard-Lucas and Grych (2011) also suggested that children who were exposed to domestic violence or aggression in the home were more willing to accept aggression as an appropriate or effective means of reacting to an altercation, less likely to experience empathy for the individual being perpetrated against, and more likely to respond aggressively when provoked in their own relationships. There also was some evidence that these children were more willing to utilize violence themselves (Carlson, 1991; DeBoard-Lucas & Grych, 2011; Jackson, 1999). Given these findings, it may be more likely that individuals who were exposed to domestic violence in childhood would experience more difficulties in their adult partner relationships and in their parenting.

Adult Relationships

With regard to more specific data about the connection between exposure to domestic violence in childhood and adult partner relationship difficulties, Sigelman, Jordan-Berry, and Wiles (1984) found a relationship between childhood maltreatment and dating violence later in life for women but not for men (Jackson, 1999). Stets and Pirog-Good (1989) also suggested that

there was a relationship between experiencing and having witnessed violence in childhood and the experience of violence in dating relationships for women, thereby suggesting an increase in the likelihood of revictimization. Breslin and colleagues (1990) found that witnessing domestic violence was significant for men's abuse of women and that women who experienced childhood familial aggression endorsed using physical aggression in their dating relationships. In their study, 44% of males and 46% of females experienced interparental aggression. Of those who were exposed to domestic violence in childhood, 23% of males and 39% of females endorsed the presence of at least one instance of physical aggression in their current dating situation. Burke, Stets, and Pirog-Good (1989) reported similar findings, in that males but not females showed an association with both witnessing abuse and being abused and their experience of dating violence, whether physical and/or sexual.

Thus, a number of researchers suggested that there was a relationship between exposure to domestic violence and dating violence perpetration as well as between exposure to family violence and dating violence (Bell & Naugle, 2008; DeBoard-Lucas & Grych, 2011; Jackson, 1999; Lee, Reese-Weber, & Khan, 2014). Given these findings, individuals who witnessed domestic violence in childhood were more prone to being in adult intimate relationships where some kind of abuse or dysfunction existed. In other words, these individuals were at risk for being involved in unhealthy adult relationship situations, for becoming perpetrators or being perpetrated against themselves in these relationships (DeBoard-Lucas & Grych, 2011), and for not being attached securely to their intimate partners (Ehrensaft et al., 2003; Herrenkohl et al., 2008).

Given the aforementioned findings, research suggested that exposure to domestic violence in childhood had a direct connection to individuals believing that violence within the

family was acceptable and/or should be tolerated (Lewis & Fremouw, 2001). Certainly, these effects can have a long-term impact on interpersonal relationships (Breslin et al., 1990; Burke et al., 1988; Jackson, 1999; Sigelman et al., 1984; Stets & Pirog-Good, 1989). Since it was understood that childhood exposure to domestic violence can increase individuals' risk of engaging in unhealthy intimate relationships in adolescence and adulthood (Ehrensaft et al., 2003; Herrenkohl et al., 2008; Lewis & Fremouw, 2001), more information about individuals who were exposed to domestic violence in childhood and who enter maladaptive adult relationships was needed. Much research had focused on identifying and reporting possible outcomes of childhood exposure, but further research could be used to characterize the relationship between childhood exposure to domestic violence and problematic adult relationships. This information would be useful when considering outcomes for future generations because it could inform possible interventions for children exposed to domestic violence.

Parenting

At this time, the extent to which individuals' childhood exposure to domestic violence was related to their parenting behaviors in adulthood was not understood fully. The relationship between childhood exposure to domestic violence and other aspects of marital relationships in home environments would appear to have both direct and indirect effects (Brody et al., 1996). The direct effects were the actual signs and symptoms that were manifested because of witnessing the violence, whereas indirect effects that were displayed in children typically were attributed to disruption in parenting behaviors (see also Anderson & Cramer-Benjamin, 1999; Brody et al., 1996; Fincham, Osborne, & Grych, 1994).

When the role of the parent-child relationship was examined, it was evident that domestic violence could impact children's experiences, even if the domestic violence was not targeted at the children themselves. In particular, Davies and Cummings (1994) identified two parenting styles associated with domestic violence that resulted in behavior problems in children. The first parenting style was permissive parenting, which was predictive of children's oppositional defiance, delinquency, and criminal involvement. The second parenting style was authoritarian parenting, which included harsh and/or strict discipline and encouraged synonymous patterns of aggression, impulsivity, and delinquency (Davies & Cummings, 1994). Other research supported these findings, suggesting that both permissive parenting and authoritarian parenting were reflective of parents who could be characterized as domestically violent (Brody et al., 1996; Fincham et al., 1994; Levendosky, Huth-Bocks, Shapiro, & Semel, 2003; Margolin et al., 2003). These styles also contributed to internalizing and/or externalizing behavior problems in children (Aunola & Nurmi, 2005; Brody et al., 1996; Fincham et al., 1994).

When more positive parenting could be identified in the context of domestic violence, Levendosky and colleagues (2003) found that authoritative parenting behaviors were related positively and significantly to children's displays of positive behaviors. Similarly, Levendosky and colleagues (2002) demonstrated the protective benefit of positive parenting behaviors on adolescent outcomes. This information demonstrated the role that supportive caregiving can play in the improvement of child outcomes, even in the context of domestic violence. Although domestic violence and certain parenting styles were associated, it also would be helpful to understand whether childhood exposure to domestic violence was related to the later use of specific parenting behaviors by mothers of young children.

Many factors may contribute to the way in which parents in domestically violent situations parent their children. Although difficult to examine without a longitudinal design, it should be noted that parenting behaviors and children's behaviors likely are related bidirectionally, with each impacting the other in turn. Levendosky and Graham-Bermann (2000) found that domestic violence was related significantly to parental warmth. The researchers explained that domestic violence did not predict significantly "parenting authority-control, over and above other systemic and individual factors" (Levendosky & Graham-Bermann, 2000, p. 89). Instead, these researchers stated that "mothers' current behavior is reciprocally influenced by the child's current behavior. However, this becomes a chicken-and-egg question" (p. 89). When discussing parenting in the context of domestic violence, it would be difficult to determine whether the child's behavior during a parent-child interaction predicted the mother's behavior or whether the child's behavior was a response to a pattern of behaviors displayed by the mother over many years (Levendosky & Graham-Bermann, 2000). As a result, this study started tackling these questions by attempting to determine if mothers' exposure to domestic violence during their own childhoods predicted their parenting behaviors.

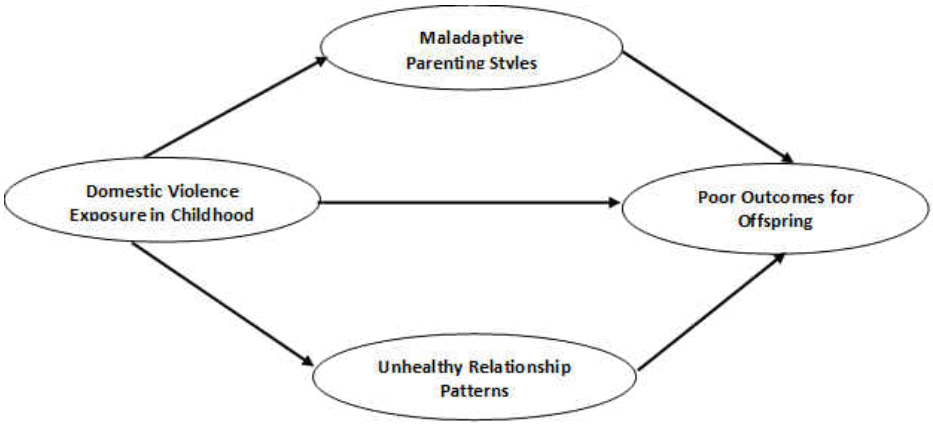
The Present Study

Given this collective literature, it was important to examine the relationships between mothers' exposure to domestic violence during their own childhoods and their adult interactions in the context of interpartner violence and parenting behaviors. Existing research typically looks at either the outcomes of children in domestically violent homes and/or mothers' current/past involvement in interpartner violence and their relationship with their children. Few studies take a retrospective approach when examining exposure to domestic violence during childhood, allowing for a collective examination of mothers' intimate relationship patterns, their parenting

behaviors, and the behavior problems experienced by their young children. A focus on families with young children had been particularly lacking, even though young children can be especially impacted by domestic violence in their families.

As a result, this study examined mothers' retrospective experience of childhood exposure to domestic violence in their own families. It was hypothesized that mothers' childhood exposure to domestic violence would be related to interpartner violence in their adult relationships and their endorsement of difficult parenting behaviors when parenting their own children. It also was anticipated that these characteristics of these mothers' adult lives would be related to behavior problems exhibited by their young children. See Figure 1 showing the proposed overall model for the cycle associated with childhood domestic violence exposure. By understanding these relationships further, health service providers would be able to better identify and provide interventions for young children and their parents when they have experienced domestic violence. The cycle that domestic violence appears to take transgenerationally needs to end. Therefore, the components that would appear to be most prominent in the cycle (i.e., relationship functioning and parenting behaviors) need further exploration to determine if these outcomes can be predicted by childhood exposure to domestic violence.

Figure 1. **Proposed Overall Model for the Cycle Associated with Childhood Domestic Violence Exposure**



Note. The mediations in the model were of greatest interest in this study, as it was anticipated that indirect relationships between mothers' exposure to domestic violence in their childhoods and the outcomes of their young children would be most useful for understanding how to format later interventions. The literature also suggested that a direct link between mothers' exposure to domestic violence in childhood and poor outcomes for their young children could be possible.

The first purpose of this study was to determine whether a direct relationship existed between mothers' exposure to domestic violence in childhood and their experience of interpartner violence in their adult relationships. In other words, this hypothesis examined whether mothers of young children who were exposed to domestic violence in their own childhoods experienced physical, verbal, and/or sexual abuse in their interpartner relationships. It was posited that women who were exposed to any kind of domestic violence during childhood would endorse at least one personal experience with domestic violence as either a perpetrator or victim (see Figure 2) in their adult interpartner relationships.

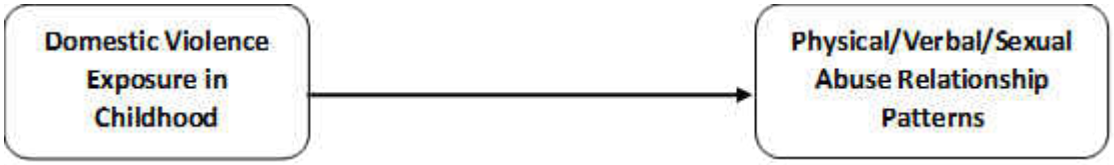


Figure 2. **Hypothesized Relationship Between Childhood Exposure to Domestic Violence and Outcomes for Future Intimate Relationships**

Second, an additional purpose of this study was to identify the pattern of parenting behaviors exhibited by mothers of young children who were exposed to domestic violence in their own childhoods. It was posited that these individuals would demonstrate maladaptive parenting behaviors (i.e., passive parenting behaviors and authoritarian parenting behaviors; see Figure 3), as suggested by a direct relationship between exposure to domestic violence during childhood and maladaptive parenting behaviors. In other words, it was expected that mothers who were exposed to domestic violence during their own childhoods would displayed passive

parenting behaviors (i.e., a laxer approach to parenting, where these mothers would lack appropriate disciplinary techniques and often would allow their children to engage in most behaviors of their child's choosing) and/or authoritarian parenting behaviors (i.e., the tendency to be rigid and strict with discipline and not engaging in appropriate reinforcement of their child's adaptive behaviors). This information would be concordant with present research that identified these two groups of parenting behaviors as being consistent with homes where domestic violence existed (Brody et al., 1996; Davies & Cummings, 1994; Fincham et al., 1994; Margolin et al., 2003).

Figure 3. **Model Demonstrating the Proposed Relationship Between Domestic Violence Exposure and Parenting Behaviors**

Finally, this study examined the relationship between domestic violence exposure in childhood and young child outcomes as mediated by a) violence in these mothers' interpartner adult relationships and b) their parenting behaviors. The expected findings were that violence in these mothers' interpartner adult relationships and their maladaptive parenting behaviors would contribute significantly to behavior problems in their young children (see Figures 1, 4, and 5). The idea was that childhood domestic violence exposure would predict violence in adult interpartner relationships. These negative relationship patterns would likely be associated with behavior problems for young children. Also, it was expected that mothers who were exposed to childhood domestic violence would engage in parenting behaviors not conducive to healthy child outcomes.

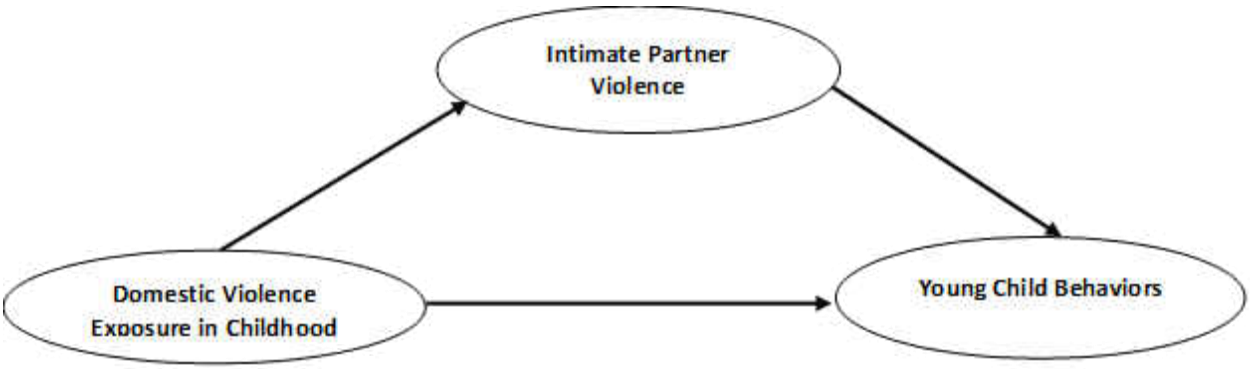


Figure 4. **Model showing the mediating role of interpartner violence on the relationship between exposure to domestic violence during childhood and young child behavior problems**

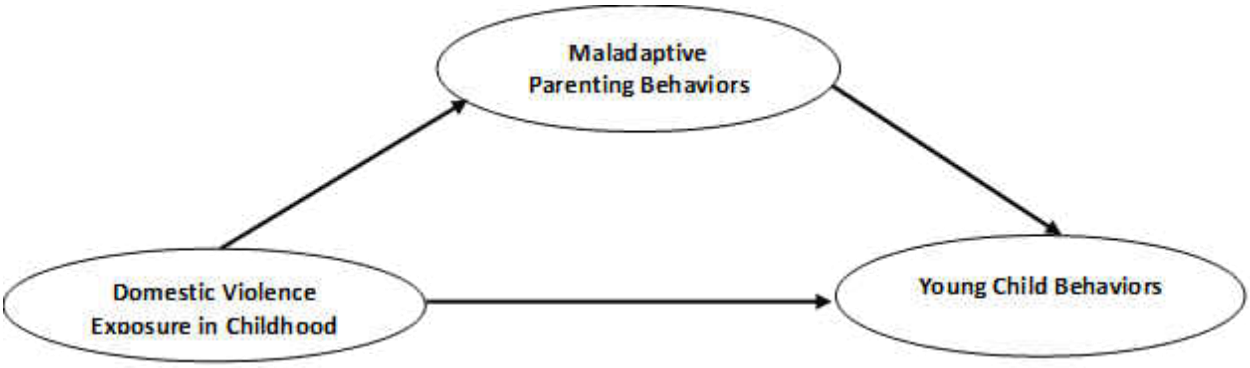


Figure 5. **Model showing the mediating role of interpartner violence on the relationship between exposure to domestic violence during childhood and young child behavior problems**

CHAPTER TWO: METHODOLOGY

Participants

Data for the present study were collected from 133 mothers in the United States who had children between 1½ - and 5-years of age. The suggested sample size for a hierarchical regression analysis ($p < .05$) with four predictor variables (i.e., the most complex analysis proposed for this study) and a statistical power of .80 was 85 participants in order to detect a medium (R = .15) effect size (Cohen, 1992). As a result, the sample obtained for the current study was large enough to complete successfully the proposed analyses.

The mothers were recruited from an online Internet crowdsourcing venue (i.e., Amazon Mechanical Turk). Inclusion criteria for participants were that they had to be a) mothers who were 18-years of age or older and who were residing in the Unites States, b) had to have exposure to domestic violence in childhood, and c) had to have at least one child between 1½- and 5-years of age. Inclusion questions were asked prior to admittance to the research packet. Mothers were disqualified from entering the research packet if any of the inclusion questions were answered to the contrary. Mothers were not excluded based on race/ethnicity, religious affiliation, sexual orientation, or socioeconomic status. Mothers who participated were provided a small monetary compensation (i.e., $1.00) through Amazon Mechanical Turk.

For clarification regarding screening for inclusion criteria, mothers were asked about the relevant demographic characteristics prior to admittance to the actual questionnaires and then on multiple occasions and in different ways about their relevant demographic characteristics (e.g., their gender, age, location, and age of child). In order to gain further access to the actual questionnaires, mothers were required to respond truthfully to each of these screening questions. If responses did not demonstrate inclusion (e.g., answering “No” to “Do you reside in the United

States"; answering "Male" or "Prefer not to answer" to the question regarding gender), participants would be disqualified and were unable to continue to the actual questionnaires.

Further, regarding childhood exposure to domestic violence, mothers were asked the following question at the very start of participation: "During your childhood did you experience your parent/caregiver engaging in any of the following toward your other parent/caregiver in the home?" Mothers were asked to select all responses that applied to them, such as "Shout at your other parent/caregiver," "Curse at your other parent/caregiver," "Hit your other parent/caregiver," "Kick your other parent/caregiver," and "Engage in any other form of physical violence." Mothers were provided access to the actual questionnaires if they provided an affirmative response to any of these options. If mothers responded "None of the above" to this question, they were disqualified and were not asked to continue with the survey.

For clarification regarding validity of responses, participants were required to respond to three demographic related questions in combination with additional validity questions included throughout the study confirmed participants inclusion in the study. For the demographic related questions, participants were asked to respond to the following questions: "This is an anonymous survey?", with responses including "Yes", "No", or "I choose whether my information remains anonymous"; "I have never been in a romantic/intimate relationship", with responses including "True" or "False"; and "Select Option A", with responses including "A", "B", "C", and "D". Additional questions were used to confirm participants' physical location (e.g., asking for a ZIP code), the age of each participants' young child (e.g., asking for the young child's age, asking for the birthdate and the date in which participant took the survey), the age of parent (e.g., asking for the participants' exact age), and the relationship to child (e.g., biological mother, biological father).

Examination of each of the validity items was completed to confirm consistency of each participant's responses and to determine inclusion in the sample for the final analyses of the data collected. If responses to any of these items were incorrect or inconsistent, participants' data were not included in the final analyses. This procedure was completed in order to reduce the likelihood of including data from individuals who were screened into the sample but who did not actually meet inclusion criteria being included in the final analyses.

Overall, 593 participants who accessed the survey did not complete the survey in its entirety, as 580 individuals were disqualified from the survey for not meeting entry requirements (as just noted). Thirteen participants who passed the qualifying questions were disqualified for different reasons, including not being mothers and/or having children outside the designated age range (even though they clearly would have had to say that they met the specified criteria to enter the survey) or answering validity and/or additional inclusion questions incorrectly. As a result, 133 participants completed the survey in full and were included in the analyses.

Participant Demographics

Mothers who participated in this study were an average of 31.31-years of age (SD = 5.60-years). See Table 1 for participant demographic information. Regarding ethnicity, 91 of the mothers were Caucasian (68.42%), 12 mothers were Hispanic (9.02%), 12 mothers were African American (9.02%), 8 mothers were Asian (6.02%), 5 mothers were Native American (3.76%), and 5 mothers were Multiethnic or Other ethnicities not listed here (3.76%). Regarding the marital status of participants, 84 (63%) mothers were married, 29 (21%) reported living with their significant other, 11 (8.27%) mothers were single, 8 (6.02%) were divorced, and 1 (.75%) was widowed.

For annual household income and socioeconomic status, 4 (3.01%) mothers reported yearly household income less than $10,000, 7 (5.26%) mothers reported an estimate of $10,000-$20,000, 17 (12.78%) mothers reported an estimate of $20,000-$30,000, 14 (10.53%) mothers reported an estimate of $30,000-$40,000, 24 (18.05%) mothers reported an estimate of $40,000-$50,000, 15 (11.28%) mothers reported an estimate of $50,000-$60,000, 18 (13.53%) mothers reported an estimate of $60,000-$70,000, and 34 (25.26%) mothers reported earning greater than $70,000 yearly. Regarding mothers' education level, there were no mothers who reported having less than a high school diploma, 14 (10.53%) completed high school, 7 (5.26%) completed vocational training, 41 (30.83%) completed some college, 52 (39.1%) completed a Bachelor's degree, 16 (12.03%) completed graduate professional training, and 3 (2.26%) completed post-doctoral training. Lastly, the mean age of these mothers' young children was 3.46 years (SD = 1.24). Male children represented 49.62% of the sample, and female children represented 50.38% of the sample.

Because the current study examined interpartner relationships, some demographic information was collected from the mothers on their young child's other parent, particularly partner education level. Regarding the young children's other parents' education level, 3 (2.26%) had less than a high school diploma, 7 (5.26%) completed some high school, 25 (18.8%) completed high school, 10 (7.52%) completed vocational training, 32 (24.06%) completed some college, 36 (27.07%) were reported as completing a Bachelor's degree, 13 (9.77%) completed graduate professional training, and 7 (5.26%) completed post-doctoral training. No other demographic information was collected for the young children's other parents.

Procedure

After receiving approval from the IRB at the University of Central Florida, an electronic survey was uploaded to the Amazon Mechanical Turk system, and data were collected subsequently. Individuals were required to log on to this electronic internet survey where they confirmed their participation. Individuals also were provided contact information for the Young Children and Families Research Clinic and Laboratory should they wish to discuss their participation.

Mothers who chose to participate via the online survey were provided a link allowing them access to the screening questions first and then the actual questionnaires. After receiving access to the study's webpage, mothers were directed to a consent page, where they indicated their understanding and agreement to participate. Mothers then provided their responses to questions about the criteria for selection into the study and then to the various questionnaires included in this study. Upon completion of all questionnaires, a debriefing form was displayed. This form provided participants with references to relevant research articles about the topic being investigated with this study as well as national numbers and/or websites for venues that may provide further information about the experience of domestic violence. Based on usage information provided by the online survey system, the mean time for mothers to complete the survey was approximately 29 minutes.

An investigator was available at all times via email or telephone during the completion of the survey to respond to any questions that mothers might have. Once the study was completed, data were stored on a password-protected computer in the faculty investigator's laboratory. To ensure anonymity, there was no personally identifying information requested as part of the questionnaire packet, and consent forms for this study did not require a signature. Due to the

sensitive nature of the information collected for this study, a certificate of confidentiality was sought. Ultimately, data collected for all participants were analyzed in group format, and there was no singling out of individual packets for examination. Data collected for this project were analyzed using the Statistical Package for the Social Sciences (SPSS).

Measures

Demographics. Mothers first were asked to complete a brief questionnaire designed to obtain their demographic information. This survey was composed of questions that asked the mothers to provide information regarding characteristics about them as well as their children. The kind of information requested included age, ethnicity, occupation, gender, and other related demographic details. See *Appendix C* for a sample of the demographic survey.

Childhood Exposure to Domestic Violence. As a means of gathering an accurate history of interpartner violence experienced in childhood, completion of the *Maltreatment and Chronology of Exposure* (*MACE;* Teicher & Parigger, 2015) scale was requested of all participants (and used to determine who had exposure to domestic violence in their childhoods). The MACE, a 52-item survey, was used to obtain a retrospective assessment of participants' history of childhood abuse, neglect, and other related aspects of their childhood home environment across ten domains (i.e., emotional neglect, nonverbal abuse, parental physical maltreatment, parental verbal abuse, peer emotional abuse, peer physical bullying, physical neglect, sexual abuse, witnessing interparental violence, and witnessing violence to siblings). Teicher and Parriger (2015) found that Total MACE scores showed high test-retest reliability (Severity: $r = 0.908$; Multiplicity: $r = 0.879$), and MACE multiplicity met Bland and Altman criteria for test-retest reproducibility. Also, these researchers found moderate intercorrelations among the ten maltreatment subscales (mean $r = 0.320 \pm 0.106$).

Items on the MACE were rated as 'Yes' or 'No'. Examples of the items on the MACE include "Swore at you, called you names, said insulting things like your "fat", "ugly", "stupid", etc. more than a few times a year", "Saw adults living in the household push, grab, slap or throw something at your mother (stepmother, grandmother)," and "Saw adults living in the household hit your mother (stepmother, grandmother) so hard that it left marks for more than a few minutes." In this study, the internal consistency of the MACE total subscale was excellent (α = .91). For the witnessing interpersonal violence scale, the scale most relevant to this study, the Cronbach's alpha also was good (α = .79). See *Appendix D* for a sample of the MACE measure.

Interpartner Violence. The *Partner Violence Screen* (*PVS*; Feldhaus et al., 1997) and the *Woman Abuse Screening Tool* (*WAST*; Brown, Lent, Brett, Sas, & Pederson, 1996) were completed by participants admitted to the remainder of the questionnaires for this study. The PVS was administered as a means of screening for the presence and history of couple violence in the participants' current relationships. The WAST was administered as a means of gathering further information about interpartner violence experienced by each participant.

The PVS is a short three-item screening measure that was used to detect partner violence. The PVS yields a sensitivity of 71% in detecting partner violence and a specificity of 84% (Feldhaus et al., 1997). The researchers report a positive predictive power of 63.4% and a negative predictive value 88.7% (Feldhaus et al., 1997). The PVS has a detection rate of 64.5% to 71.4% for the detection of women with a history of partner violence. The questions on the PVS are "Have you been hit, kicked, punched, or otherwise hurt by someone within the past year? If so, by whom?", "Do you feel safe in your current relationship?", and "Is there a partner from a previous relationship who is making you feel unsafe now?" See *Appendix E* for a sample of the PVS tool.

The WAST is a seven-item screening tool used alongside the PVS to identify female interpartner abuse. Brown, Lent, Brett, Sas, and Pederson (1996) found high reliability of the WAST, with an internal consistency coefficient α equaling 0.95 (Brown et al., 1996). The item-total correlations had a range of $r = 0.81$ to 0.89, and the component loadings assigned to the seven items had an $r > 0.85$ (Brown et al., 1996). The items on the WAST were rated on a three-point Likert-like scale, where response options available for specific items included *A lot of tension* to *No tension*, *Great difficulty* to *No difficulty*, and *Often* to *Never* (Brown et al., 1996). Items on the WAST include questions such as "In general, how would you describe your relationship?", "Do arguments ever result in you feeling down or bad about yourself?", and "Has your partner abused you physically?" (Brown et al., 1996). In this study, the internal consistency was good (α = .88). See *Appendix F* for a sample of the WAST measure.

Parenting Techniques. The *Alabama Parenting Questionnaire* (*APQ*; Frick, 1991) consists of a 42-item parent form, a 42-item child form (Shelton, Frick, & Wootton, 1996), and a 32-item Preschool Revision (*APQ-PR*; Clerkin, Marks, Policaro, & Halperin, 2007). Completion of the APQ-PR parent form was requested of participants in this study. The APQ-PR was used to evaluate each participant's involvement with their child, their use of positive reinforcement, their monitoring and supervision of their child, their consistency with which they instill discipline, and their use of corporal punishment. The Preschool Revision parent form consists of three dimensions (Coefficient alphas are reported from Clerkin et al., 2007): Positive Parenting (α = 0.82), Negative/Inconsistent Parenting (α = 0.74), and Punitive Parenting (α = 0.63). Responses were rated on a five-point Likert scale from *Never* (1) to *Always* (5), and items were phrased in statement form (e.g., "You have a friendly talk with your child.", "You play games or do fun things with your child.", and "You praise your child if he/she behaves well."). For this study, the

internal consistency for each domain was good, with alphas for each domain being .94, .81, and .80, respectively. See *Appendix G* for sample of the APQ-PR measure.

For this study, the total scores on this measure for Negative/Inconsistent Parenting and Punitive Parenting were used. The Negative/Inconsistent Parenting score represented Passive Parenting in this study, and the Punitive Parenting score represented an Authoritarian Parenting style. Positive Parenting was used for comparison purposes.

Young Children's Behavior Problems. The *Child Behavior Checklist 1½ to 5 years* (CBCL; Achenbach & Rescorla, 2000) consists of 99 items. Mothers were asked to rate their oldest child between 1½- and 5-years regarding the difficulties that the child may be exhibiting. Data regarding young children's internalizing and externalizing behavior problems were the primary focus. Responses were rated on a three-point Likert scale from *Not True* (0) to *Often True* (2), and items were phrased in statement form (e.g., "Poorly coordinated or clumsy", "Acts too young for age", and "Self-conscious or easily embarrassed"). Scores were represented as T-scores, with cut off values that represent clinically significant distress in varying domains. Mothers were required to complete the CBCL for this study as a means of gaining information about mothers' perceptions of their young child's behavior problems. See *Appendix H* for sample of the CBCL measure.

CHAPTER THREE: RESULTS

Descriptive Information

Prior to discussing the analyses, gaining a contextual understanding of the data was important. Descriptive analyses (i.e., means and standard deviations) were calculated for each variable of interest. See Table 2 for descriptive data on the independent and dependent variables included in this study. First, regarding mothers' self-reported childhood experience of domestic violence (as measured by the MACE), 48.87% (N = 65) of mothers met the cut off (T-score ≥ 2) for childhood exposure to domestic violence using the cut off values suggested by the developers (Teicher & Parigger, 2015). It is important to note that the domain for exposure to domestic violence on the MACE was focused on exposure to physical acts of domestic violence in the childhood home. It also should be noted that the MACE added additional information to the screening question that was used to allow all participants to enter the study (i.e., that they had some sort of domestic violence exposure in their childhood homes) and to complete the actual questionnaires for this study. Thus, every mother included in this study had some exposure to domestic violence in their childhoods, but the MACE suggested that there was variability across participants in whether or not they met clinical cut offs for exposure.

Next, descriptive data were examined for mothers' own past or current experience with interpartner violence (using both the PVS and WAST). All mothers reported a presence and history of interpartner violence on the PVS (M = 1.24, SD = .52; as scores could range from 0 to 3). Using the developer's recommended cut off of 13 for the WAST, 39 (29.3%) women in the study met criteria using this measure for the experience of interpartner violence (M = 15.46, SD = 2.76; scores could range from 0 to 24). Iskander and colleagues (2015) found that using a cut off of 10 improved the sensitivity of the measure while decreasing specificity. Although Iskander

and colleagues (2015) administered the WAST on an Indonesian sample, the researchers wanted to take a sensitive approach for this study, so a cut off of 10 was used when analyzing these data. By using this approach, women who may be experiencing interpartner violence were more likely to be identified. Although using the lower cut off score reported by Iskander and colleagues reduced specificity, the specificity still was considered reasonable (Iskander et al., 2015). Additionally, given that this sample included mothers of mixed racial and ethnic backgrounds, it was important to be culturally sensitive. The developers of the WAST did not report the racial or ethnic background of the women in their study. In an attempt to be inclusive of individuals who may interpret their experiences of interpartner violence differently, it again made sense to use the lower cut off. With a cut off of 10 for this study, 89 mothers (66.92%) met criteria for interpartner violence (M = 12.89, SD = 2.97; scores could range from 0 to 24).

Then, mothers' perceptions of their parenting behaviors were obtained. The APQ-PR was used to obtain information about the ways in which the mothers were parenting their young children. Mothers endorsed an average positive parenting score of 50.88 (SD=9.88; scores could range from 12 to 60). An average score of 19.17 (SD=5.76; scores could range from 8 to 40) was obtained for mothers' endorsements of negative/inconsistent parenting. Finally, an average score of 9.37 (SD=3.87; scores could range from 5 to 25) was provided by mothers for punitive parenting behaviors.

Finally, the CBCL was used to obtain information regarding mothers' reports of their young child's internalizing and externalizing behavior problems. Mothers' scores were reported as T scores. For internalizing and externalizing behavior problems on the CBCL, a T score of 60 or greater is interpreted as clinically significant (Achenbach & Rescorla, 2000). Mothers reported on average internalizing behavior problem score of 46.50 (SD= 14.70), with 28 (21%) mothers

reporting that their young child was experiencing clinically significant difficulties with internalizing behavior problems (T ≥ 60). The scores reported for internalizing behavior problems on the CBCL ranged from 29 to 87 (the scores could range from 0 to 100). For externalizing behavior problems, mothers reported an average score of 46.90 (SD=11.50), with 23 (17.3%) mothers reporting that their young child was experiencing clinically significant distress for this domain (i.e., scores of T ≥ 60). The minimum score reported for externalizing behavior problems was 28, with a maximum score of 85 (scores could range from 0 to 100).

Preliminary Data Analyses

Pre-screening of data was conducted initially by first screening for multicollinearity or singularity and homogeneity or homoscedasticity.

Multicollinearity

No predictor variables included in the analyses exhibited multicollinearity. The Variance Inflation Factor (VIF) for each variable was less than 10 (i.e., scores ranged from 1.07 to 1.73).

Nonlinear Relationships

Linear relationships then were evaluated between internalizing and externalizing behavior problems and each mediator. P-P plots were assessed for both dependent variables, and partial plot estimations reflected linear relationships between interpartner violence and young child behavior problems (i.e., internalizing and externalizing behavior problems) as well as between parenting (i.e., positive-, negative/inconsistent- and punitive parenting) and young child behavior problems (i.e. internalizing and externalizing behavior problems).

Correlational Analyses

Correlations among with variables were examined to investigate the relationships among the variables of interest and to examine the primary hypotheses regarding the relationships between mothers' exposure to domestic violence during childhood, interpartner violence in their adult relationships, and their parenting behaviors. Given that the variables were checked for, but did not display, curvilinear relationships, Pearson correlations were examined. Evaluation of the correlations provided support for the hypotheses regarding the variables of interest as previously mentioned. Each relationship will be discussed specifically below. See Table 3 for a summary of the correlations for the overall sample.

Given the number of correlations being used it was deemed appropriate to include an adjustments to control for Type-1 error. Given that a Bonferroni correction for family-wise error is a conservative approach to adjusting for Type-1 error, making such an adjustment may inflate Type-2 error. As a result, a Bonferroni correction was conducted to control for the family-wise error rate. The *p* critical value obtained was $p \leq .002$. Although correlations are discussed broadly here, the values that remain significant after this adjustment are noted in Table 3.

Domestic Violence Exposure

Regarding mothers' childhood exposure to domestic violence, mothers' childhood exposure to domestic violence via the MACE was related significantly to their ratings of interpartner violence in their adult relationships when looking at the PVS. Specifically, mothers' reports of childhood exposure to domestic violence (i.e. MACE measure) was related positively and significantly to mothers' reports of interpartner violence in their adult relationships via the PVS ($r = .19$, $p < .03$). Thus, meeting criteria for childhood exposure to domestic violence on the MACE was associated with the likelihood of experiencing interpartner violence on the PVS. The PVS was the only variable significantly correlated with childhood exposure to domestic

violence. These results support the hypothesis that mothers of young children who were exposed to domestic violence in their childhood were more likely to report a past and/or current history of interpartner violence themselves in adulthood.

Regarding mothers' childhood exposure to domestic violence, mothers' childhood exposure to domestic violence via the MACE was not related significantly to their ratings of parenting behaviors using the APQ-PR. Specifically, mothers' reports of childhood exposure to domestic violence (i.e. MACE measure) was not related significantly to positive (r = -.11, p <.19), negative (r = .01, p <.94), or punitive (r = -.09, p <.30) parenting behaviors. Thus, meeting criteria for childhood exposure to domestic violence on the MACE was not associated with the likelihood of reporting positive, negative, or punitive parenting behaviors. These results do not support the hypothesis that mothers of young children who were exposed to domestic violence in their childhood were more likely to report maladaptive parenting behaviors (i.e., negative, and/or punitive parenting behaviors).

Interpartner Violence

Experience with interpartner violence was related negatively and significantly to positive parenting behaviors when looking at scores from both the PVS (r = -.23, p < .01) and the WAST (r = -.37, p < .001). Thus, experience of interpartner violence was related to a reduction in reports of engaging in positive parenting behaviors. Further, reporting interpartner violence on the WAST also was related positively and significantly to punitive/harsh parenting behaviors (r = .23, p < .01). Thus, mothers who endorsed interpartner violence also reported using punitive/harsh parenting behaviors.

Next, when looking at interpartner violence, the PVS was correlated positively and significantly with mothers' reports of internalizing behavior problems in their young children (r = .19, p < .03.), and the WAST was correlated positively and significantly with mothers' reports

of externalizing behavior problems in their young children (r = .18, p < .04). Thus, reporting personal experiences with interpartner violence was associated with reports of behavior problems in young children. These findings supported the hypotheses that mothers' interpartner violence involvement and young child behavior problems were related significantly

Parenting Behaviors

First, the relationships between positive parenting (r=-.22, p< .01), negative/inconsistent parenting (r=.44, p< .001), and punitive parenting (r=.43, p< .001) and internalizing behavior problems in young children were considered. These correlations, when examined broadly, implied that the parenting behaviors reported by mothers were associated with their young children's inwardly focused maladaptive behaviors. Second, the relationships between negative/inconsistent parenting (r=.43, p< .001) and punitive parenting (r=.42, p< .001) and externalizing behavior problems in young children were considered. These correlations suggested that reporting the use of maladaptive parenting behaviors was associated with reporting maladaptive and/or dysregulated young child behavior problems. These findings supported the hypothesis that there was a significant relationship between mothers' parenting behaviors and young child behavior problems.

Regression and Mediation Analyses

Regression Analyses

Correction for Potential Error. A Benjamini-Hochberg procedure (i.e., to control for a false discovery rate [FDR]) was performed to control for Type-1 error across the regression analyses in the present study. Given the number of tests being conducted in this study, the Benjamini-Hochberg procedure will serve as a control for false positive results. A note was made in subsequent sections regarding any analyses affected by the FDR adjustment. The Benjamini-Hochbeg procedure for FDR is a less conservative approach to controlling for Type-1

error than the Bonferroni correction and, as a result, reduces the chances of committing Type-2 error.

Parenting Behaviors and Young Children's Behavior Problems. Given the hypothesis suggesting that maladaptive parenting behaviors collectively would predict young child behaviors problems, a regression analysis was conducted to determine if parenting behaviors collectively predicted internalizing behavior problems and externalizing behavior problems in young children. All parenting variables were entered together. The results indicated that, together, parenting behaviors (i.e., positive, negative/inconsistent, and punitive parenting) contributed 27% of the variance in the model for internalizing behavior problems, $F(3,129)=15.65$, $p<.001$, $R^2=.27$. Specifically, positive ($p<.03$), negative/inconsistent ($p<.001$), and punitive ($p<.03$) behaviors contributed significantly to internalizing behavior problems in young children. Likewise, parenting behaviors (i.e., positive, negative/inconsistent, and punitive) contributed 23% of the variance for externalizing behavior problems, $F(3,129)=12.74$, $p<.001$, $R^2=.23$. Specifically, negative/inconsistent ($p<.005$) and punitive ($p<.01$) behaviors contributed significantly to externalizing behavior problems in young children. Positive parenting behaviors ($p<.91$), however, did not contribute significantly to the externalizing behavior problems in young children. See Table 4 for summary of regression results.

Hierarchical Regression Analyses for Overall Model

Next, hierarchical regression analyses were conducted to determine which variables predicted significantly young children's internalizing and externalizing behavior problems. In these analyses, childhood exposure to domestic violence, interpartner violence (PVS and WAST), and parenting behaviors (positive, negative/inconsistent, and punitive parenting) served as predictor variables, and young children's behavior problems (internalizing and externalizing behavior problems) served as the criterion variables. Specifically, the variable for mothers'

childhood exposure to domestic violence was entered in Block 1, interpartner violence variables were entered in Block 2, and parenting behaviors variables were entered in Block 3, so that incremental variance could be examined. See Table 5 and Table 6 for a summary of these hierarchical regression results.

Internalizing Behavior Problems. In Block 1, mothers' own childhood exposure to domestic violence did not predict significantly their young children's internalizing behavior problems, $F(1, 131) = 1.86$, $p < .18$, $R^2 = .01$. Similarly, in Block 2, mothers' history of interpartner violence did not predict significantly young children's internalizing behavior problems, $F(3, 129) = 2.16$, $p < .10$, $R^2 = .05$. In Block 3, mothers' parenting behaviors predicted significantly young children's internalizing behavior problems, $F(6, 126) = 8.94$, $p < .001$, $R^2 = .30$. Within this block, negative/inconsistent parenting ($p < .01$) and punitive parenting ($p < .05$) emerged as significant predictors.

Externalizing Behavior Problems. In Block 1, mothers' own childhood exposure to domestic violence did not predict significantly their young children's externalizing behavior problems, $F(1, 131) = .02$, $p < .90$, $R^2 = .00$. Similarly, in Block 2, mothers' history of interpartner violence did not predict significantly young children's externalizing behavior problems, $F(3, 129) = 1.43$, $p < .24$, $R^2 = .03$. In Block 3, mothers' parenting behaviors predicted significantly young children's externalizing behavior problems, $F(6, 126) = 6.51$, $p < .001$, $R^2 = .24$. Within this block, both negative/inconsistent parenting ($p < .05$) and punitive parenting ($p < .05$) emerged as significant predictors.

Mediation Analyses

Mediation Analyses: Mothers' Childhood Exposure to Domestic Violence, Interpartner Violence, and Young Children's Behavior Problems. To evaluate the next aim

of the study, mediation analyses were performed. In these analyses, mothers' exposure to domestic violence in childhood was used as the main predictor variable, interpartner violence was used as the mediator, and child behavior problems were used as the criterion variables. According to Baron and Kenny's procedure (1986), a number of findings are required to establish a mediation model. As a result, a series of regression equations were computed. First, mothers' exposure to domestic violence in childhood must predict interpartner violence later in life (path a) as well as young child behavior problems (path b). Additionally, a subsequent regression analysis must demonstrate that childhood domestic violence exposure predicts young child behavior problems (path c). With the inclusion of interpartner violence in a final regression equation, the relationship between mothers' childhood exposure to domestic violence and young child behavior problems must decrease to non-significance, indicating the mediational role of mothers' history of interpartner violence.

Although the Baron and Kenny (1986) model suggested that a relationship must exist between the predictor and criterion variables (i.e., childhood exposure to domestic violence and young child behavior problems, respectively), other research suggested that this relationship is not necessary to indicate mediation (MacKinnon, Fairchild, & Fritz, 2007; MacKinnon & Fairchild, 2009). In the present study, correlational data suggested that no significant relationship exists between mothers' childhood exposure to domestic violence and young child behavior problems (i.e., internalizing and externalizing behavior problems). As a result, mediational analyses were carried out in the event that an indirect relationship existed between the two variables through the mediator (i.e., interpartner violence). See Figure 6 and Figure 7 for a summary of mediational analyses.

Mothers' Childhood Exposure to Domestic Violence Predicting Interpartner Violence. The initial regression equation demonstrated that mothers' childhood exposure to domestic violence (using the MACE) predicted significantly interpartner violence in later life (using the PVS), $F(1,131)=4.77$, $p<.05$, $R^2=.04$.

Mothers' Interpartner Violence Predicting Young Children's Behavior Problems. Mothers' personal history of interpartner violence predicted significantly internalizing behavior problems in young children, $F(1,131)=5.02$, $p<.03$, $R^2=.04$. In contrast, mothers' history of interpartner violence was not predictive of mothers' reports of their young children's externalizing behavior problems, $F(1,131)=.83$, $p<.36$, $R^2=.01$.

Mothers' Childhood Exposure to Domestic Violence Predicting Young Children's Behavior Problems. Mothers' exposure to childhood domestic violence did not predict significantly young child internalizing, $F(1, 131) =1.86$, $p<.18$, $R^2 = .01$, or externalizing behavior problems, $F(1, 131) =.02$, $p<.90$, $R^2 = .00$.

Mothers' Childhood Exposure to Domestic Violence and Interpartner Violence Predicting Young Children's Internalizing Behavior Problems. Given the significant paths from the aforementioned series of regressions, the mediational role of mothers' history of interpartner violence was examined in the relationship between childhood exposure to domestic violence and internalizing behavior problems in young children. Collectively, mothers' childhood exposure to domestic violence and history of interpartner violence predicted significantly internalizing behaviors in young children, $F (2, 130) = 2.99$, $p < .05$, $R^2 = .04$. When entered first, mothers' childhood exposure to domestic violence did not significantly predict internalizing behavior problems in young children ($p < .18$). Nonetheless, when mothers' history of interpartner violence was added to the equation, mothers' childhood exposure to

domestic violence became less predictive ($p < .33$) of internalizing behavior problems, and interpartner violence served as a significant predictor ($p < .05$). As such, mediation using the Baron and Kenny rubric was not supported; however, the indirect paths of childhood exposure to domestic violence to young child internalizing behavior problems through interpartner violence were supported. Further, when adjustments were made for family-wise error, the mediation model was not supported, as the reported *p*-value fell above the Benjamini-Hochberg critical value (c.v.) for this analysis (c.v. = .04). The mediational value of mothers' history of interpartner violence was not confirmed given a nonsignificant Sobel Test ($z = 1.48$, $p < .14$).

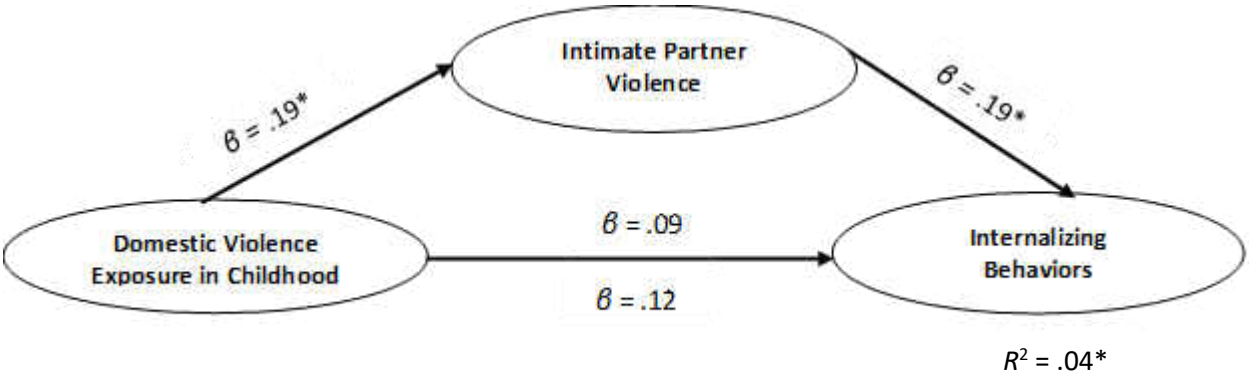


Figure 6. **Mediation model showing results for the relationship between childhood exposure to domestic violence and history of interpartner violence predicting young children's internalizing behavior problems**

Mothers' Childhood Exposure to Domestic Violence and Interpartner Violence Predicting Young Children's Externalizing Behavior Problems. Given the significant paths from the aforementioned series of regressions, the mediational role of mothers' history of interpartner violence also was examined in the relationship between childhood exposure to domestic violence and externalizing behavior problems in young children. Collectively, mothers' childhood exposure to domestic violence and history of interpartner violence did not predict significantly externalizing behavior problems in young children, F (2, 130) = .46, $p < .63$, R^2 = .01. When entered first, mothers' childhood exposure to domestic violence did not significantly

predict externalizing behavior problems in young children ($p < .90$). When mother's history of interpartner violence was added to the equation, neither mothers' childhood exposure to domestic violence ($p < .76$) nor interpartner violence ($p < .34$) served as a predictors of externalizing behavior problems in young children. As such, the relationship between mothers' childhood exposure to domestic violence and externalizing behavior problems in young children was not mediated significantly by mothers' history of interpartner violence. Further, when adjustments were made for family-wise error, no difference in significance was observed, as the reported p-value fell above the Benjamini-Hochberg critical value (c.v.) for this analysis (c.v. = .04). The lack of mediation was confirmed with a nonsignificant Sobel Test ($z = .84$, $p < .40$).

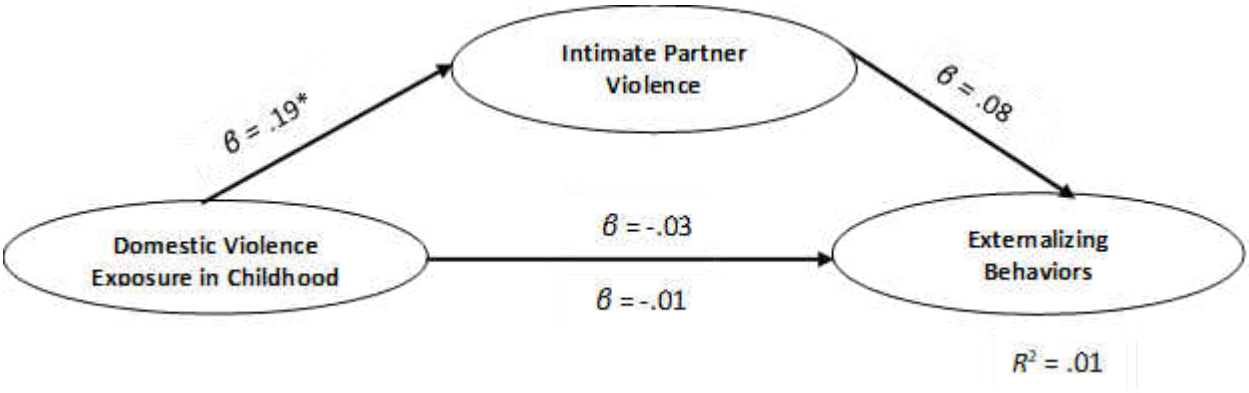


Figure 7. **Mediation model showing results for the relationship between mothers' childhood exposure to domestic violence and interpartner violence predicting young children's externalizing behavior problems**

Mediation Analyses: Mothers' Childhood Exposure to Domestic Violence, Parenting Behaviors, and Young Children's Behavior Problems. To evaluate the next aim of the study, different mediation analyses were performed. In these analyses, mothers' exposure to domestic violence in childhood was used as the main predictor variable, parenting behaviors were used as the mediator, and young child behavior problems were used as the criterion variables. According to Baron and Kenny's procedure (1986), a number of findings were required to establish a mediation model. As a result, a series of regression equations were

computed. First, mothers' exposure to domestic violence in childhood must predict parenting behaviors (path a) as well as young child behavior problems (path b). Additionally, a subsequent regression analysis must demonstrate that childhood domestic violence exposure predicts young child behavior problems (path c). With the inclusion of parenting behaviors in the final regression equation, the relationship between mothers' childhood exposure to domestic violence and young child behavior problems must decrease to non-significance, indicating the mediational role of mothers' parenting behaviors.

Similar to analyses carried out in the first set of mediations, correlational data suggested that no significant relationship exists between mothers' childhood exposure to domestic violence and young child behavior problems (i.e., internalizing and externalizing behavior problems). Therefore, analyses were carried out since other research suggested that no relationship is needed between the predictor and criterion variables in order to indicate mediation (MacKinnon et al., 2007; MacKinnon & Fairchild, 2009). As a result, mediational analyses were carried out in the event that an indirect relationship existed between the two variables through parenting behaviors (i.e., positive, negative/inconsistent, and punitive behaviors). See Figure 8 through Figure 13 for a summary of mediational analyses.

Mothers' Childhood Exposure to Domestic Violence Predicting Parenting Behaviors. Mothers' exposure to domestic violence during childhood (on the MACE) did not predict significantly any patterns of mothers' parenting behaviors. In particular, mother's exposure to domestic violence during childhood was not predictive of positive parenting behaviors, $F(1,131)=1.73$, $p<.19$, $R^2=.01$, negative/inconsistent parenting behaviors, $F(1,131)=.01$, $p<.94$ $R^2=.00$, or punitive parenting behaviors, $F(1,131)=1.07$, $p<.30$ $R^2=.01$.

Mothers' Parenting Behaviors Predicting Young Children's Behavior Problems. Regression analyses indicated that mothers' positive parenting, $F(1,131)=6.37$, $p<.01$, $R^2=.05$, negative/inconsistent parenting, $F(1,131)=31.04$, $p<.001$, $R^2=.19$, and punitive parenting, $F(1,131)=30.41$, $p<.001$, $R^2=.19$, behaviors all predicted mothers' reports of internalizing behavior problems in their young children. In contrast, mothers' positive parenting behaviors did not predict significantly externalizing behavior problems in their young children, $F(1,131)=.43$, $p<.52$, $R^2=.00$, but negative/inconsistent parenting, $F(1,131)=30.01$, $p<.001$, $R^2=.19$, and punitive parenting, $F(1,131)=28.49$, $p<.001$, $R^2=.18$, behaviors each predicted mothers' reports of externalizing behavior problems in their young children.

Mothers' Childhood Exposure to Domestic Violence Predicting Young Children's Behavior Problems. As previously noted, mothers' exposure to childhood domestic violence did not predict significantly young child internalizing behavior problems, $F(1, 131) =1.86$, $p < .18$, $R^2 = .01$, or externalizing behavior problems, $F(1, 131) =.02$, $p < .90$, $R^2 = .00$.

Mothers' Childhood Exposure to Domestic Violence and Positive Parenting Behaviors Predicting Young Children's Internalizing Behavior Problems. Given the significant paths from the aforementioned series of regressions, the mediational role of mothers' positive parenting behaviors was examined in the relationship between childhood exposure to domestic violence and internalizing behavior problems in young children. Collectively, mothers' childhood exposure to domestic violence and positive parenting behaviors predicted significantly internalizing behavior problems in young children, $F(2, 130) = 3.80$, $p < .03$, $R^2 = .06$. When entered first, mothers' childhood exposure to domestic violence did not significantly predict internalizing behavior problems in young children ($p < .18$). When mother's positive parenting behaviors were added to the equation, mothers' childhood exposure to domestic violence became

less predictive of internalizing behavior problems in young children ($p < .27$), but mothers' positive parenting behaviors served as a predictor ($p < .05$). As mothers' childhood exposure to domestic violence did not significantly predict positive parenting in the aforementioned regression analysis, a conclusion of mediation was not warranted. Further, when adjustments were made for family-wise error, no difference in significance was observed, as the reported *p*-value was no different from the Benjamini-Hochberg critical value (c.v.) for this analysis (c.v. = .03). The lack of mediation was confirmed with a nonsignificant Sobel Test ($z = 1.15$, $p < .24$).

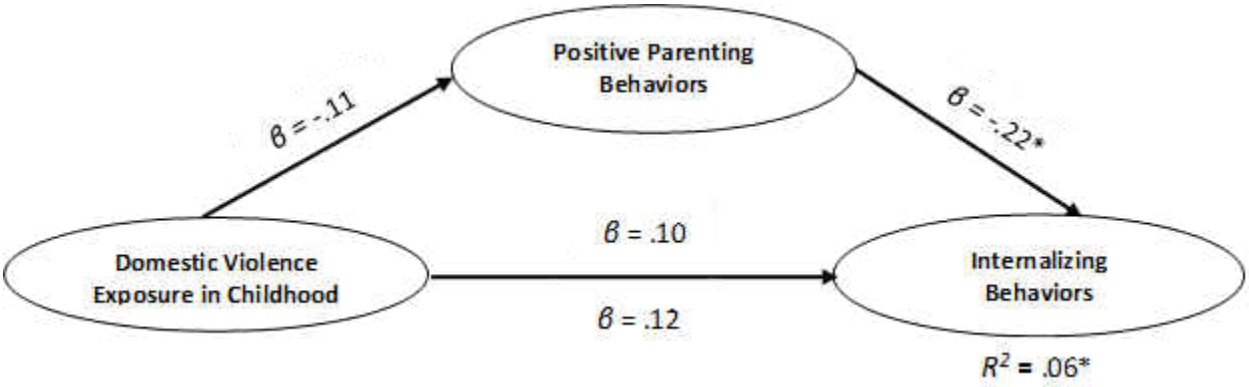


Figure 8. **Mediation model showing results for the relationship between mothers' childhood exposure to domestic violence and positive parenting behaviors predicting young children's internalizing behavior problems**

Mothers' Childhood Exposure to Domestic Violence and Negative Parenting Behaviors Predicting Young Children's Internalizing Behavior Problems. Given the significant paths from the aforementioned series of regressions, the mediational role of mothers' negative/inconsistent parenting behaviors was examined in the relationship between childhood exposure to domestic violence and internalizing behavior problems in young children. Collectively, mothers' childhood exposure to domestic violence and negative/inconsistent parenting behaviors predicted significantly internalizing behavior problems in young children, $F(2, 130) = 16.74$, $p < .001$, $R^2 = .21$. When entered first, mothers' childhood exposure to domestic violence did not significantly predict internalizing behavior problems in young children

($p < .18$). When mother's negative/inconsistent parenting behaviors was added to the equation, mothers' childhood exposure to domestic violence remained nonpredictive of internalizing behavior problems in young children ($p < .14$), but mothers' negative/inconsistent parenting behaviors served as a predictor ($p < .001$). As mothers' childhood exposure to domestic violence did not significantly predict negative/inconsistent parenting in the aforementioned regression analysis, a conclusion of mediation was not warranted. Further, when adjustments were made for family-wise error, no difference in significance was observed, as the reported p-value fell below the Benjamini-Hochberg critical value (c.v.) for this analysis (c.v. = .01). The lack of mediation was confirmed with a nonsignificant Sobel Test ($z = .08$, $p < .94$).

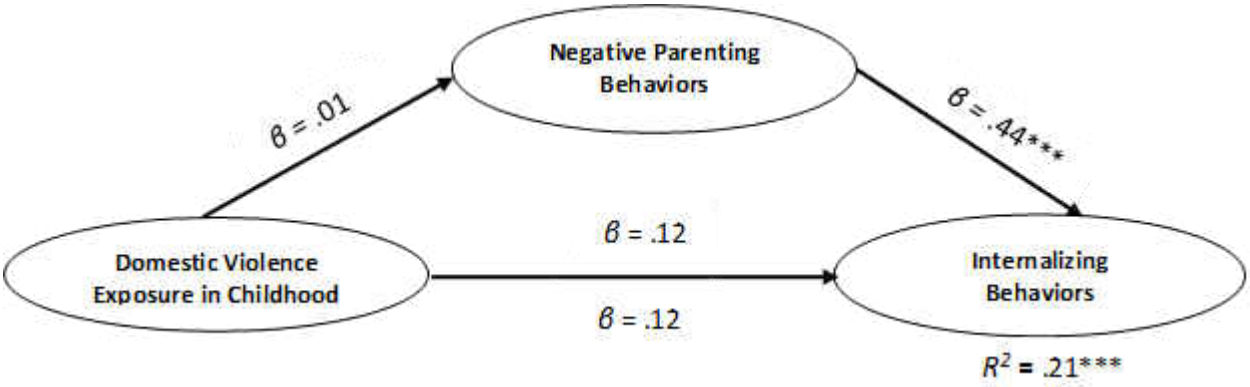


Figure 9. **Mediation model showing results for the relationship between mothers' childhood exposure to domestic violence and negative parenting behaviors predicting young children's internalizing behavior problems**

Mothers' Childhood Exposure to Domestic Violence and Punitive Parenting Behaviors Predicting Young Children's Internalizing Behavior Problems. Given the significant paths from the aforementioned series of regressions, the mediational role of mothers' punitive parenting behaviors was examined in the relationship between childhood exposure to domestic violence and internalizing behavior problems in young children. Collectively, mothers' childhood exposure to domestic violence and punitive parenting behaviors predicted significantly internalizing behavior problems in young children, F (2, 130) = 17.63, $p < .001$, $R^2 = .21$. When

entered first, mothers' childhood exposure to domestic violence did not significantly predict internalizing behavior problems in young children ($p < .18$). When mother's punitive parenting behaviors was added to the equation, both mothers' childhood exposure to domestic violence ($p < .04$) and mothers' punitive parenting behaviors served as a predictor ($p < .001$) served as predictors of young child internalizing behavior problems. As mothers' childhood exposure to domestic violence did not significantly predict punitive parenting in the aforementioned regression analysis, a conclusion of mediation was not warranted. Further, when adjustments were made for family-wise error, no difference in significance was observed, as the reported p-value fell below the Benjamini-Hochberg critical value (c.v.) for this analysis (c.v. = .01). The lack of mediation was confirmed with a nonsignificant Sobel Test ($z = 1.02$, $p < .31$).

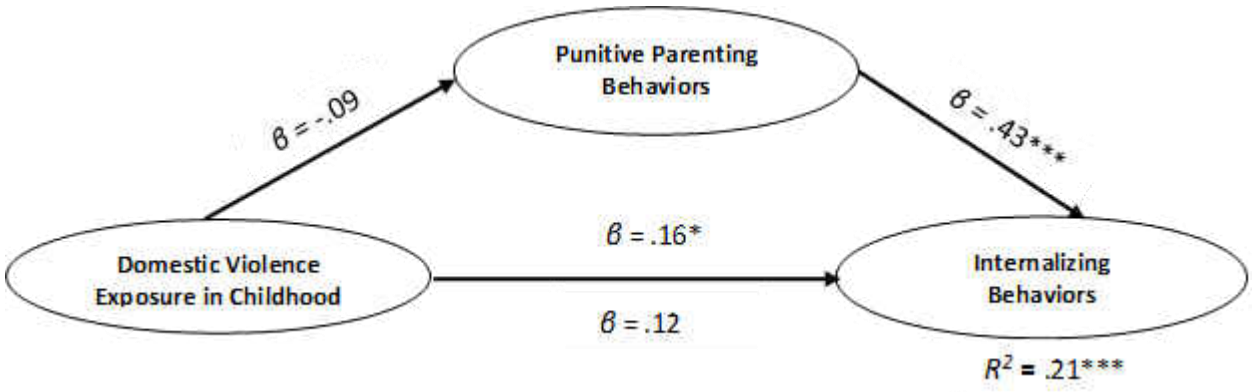


Figure 10. **Mediation model showing results for the relationship between mothers' childhood exposure to domestic violence and punitive parenting behaviors predicting young children's internalizing behavior problems**

Mothers' Childhood Exposure to Domestic Violence and Positive Parenting Behaviors Predicting Young Children's Externalizing Behavior Problems. Given the significant paths from the aforementioned series of regressions, the mediational role of mothers' positive parenting behaviors was examined in the relationship between childhood exposure to domestic violence and externalizing behavior problems in young children. Collectively, mothers'

childhood exposure to domestic violence and positive parenting behaviors did not predict significantly externalizing behavior problems in young children F (2, 130) = .23, p < .79, R^2 = .00. When entered first, mothers' childhood exposure to domestic violence did not significantly predict externalizing behavior problems in young children (p < .90). When mother's positive parenting behaviors was added to the equation, both mothers' childhood exposure to domestic violence remained (p = .84) and positive parenting behaviors (p < .51) were not predictive of externalizing behavior problems in young children. As mothers' childhood exposure to domestic violence did not significantly predict positive parenting in the aforementioned regression analysis, a conclusion of mediation was not warranted. Further, when adjustments were made for family-wise error, no difference in significance was observed, as the reported p-value fell above the Benjamini-Hochberg critical value (c.v.) for this analysis (c.v. = .05). The lack of mediation was confirmed with a nonsignificant Sobel Test (z = .09, p < .93).

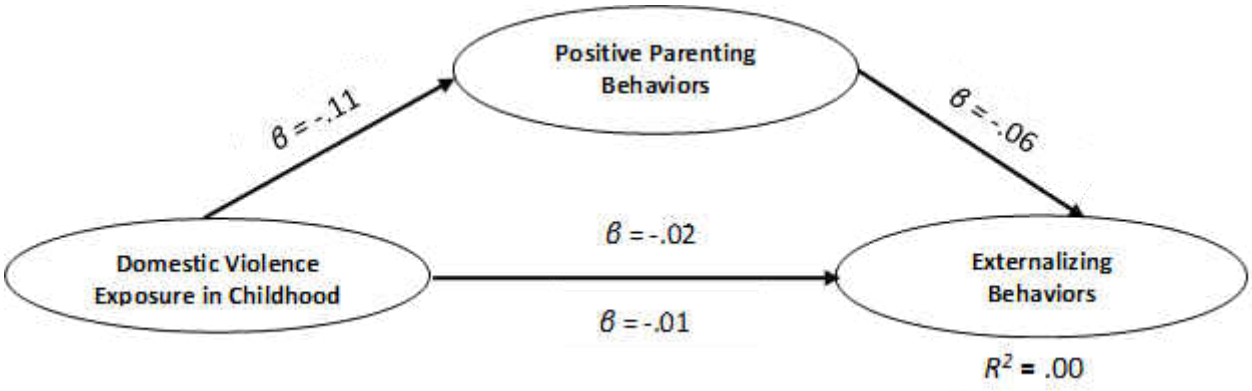


Figure 11. **Mediation model showing results for the relationship between mothers' childhood exposure to domestic violence and positive parenting behaviors predicting young children's externalizing behavior problems.**

Mothers' Childhood Exposure to Domestic Violence and Negative Parenting Behaviors Predicting Young Children's Externalizing Behavior Problems. Given the significant paths from the aforementioned series of regressions, the mediational role of mothers' negative/inconsistent parenting behaviors was examined in the relationship between childhood exposure to domestic violence and externalizing behavior problems in young children. Collectively, mothers' childhood exposure to domestic violence and negative/inconsistent parenting behaviors predicted significantly externalizing behavior problems in young children, F (2, 130) = 14.91, $p < .001$, $R^2 = .19$. When entered first, mothers' childhood exposure to domestic violence did not significantly predict externalizing behavior problems in young children ($p < .90$). When mother's negative/inconsistent parenting behaviors was added to the equation, mothers' childhood exposure to domestic violence remained not predictive of young child eternalizing behavior problems ($p < .86$), but negative/inconsistent parenting behaviors served as a predictor ($p < .001$). As mothers' childhood exposure to domestic violence did not significantly predict negative/inconsistent parenting in the aforementioned regression analysis, a conclusion of mediation was not warranted. Further, when adjustments were made for family-wise error, no difference in significance was observed, as the reported p-value fell below the Benjamini-Hochberg critical value (c.v.) for this analysis (c.v. = .01). The lack of mediation was confirmed with a nonsignificant Sobel Test ($z = .08$, $p < .94$).

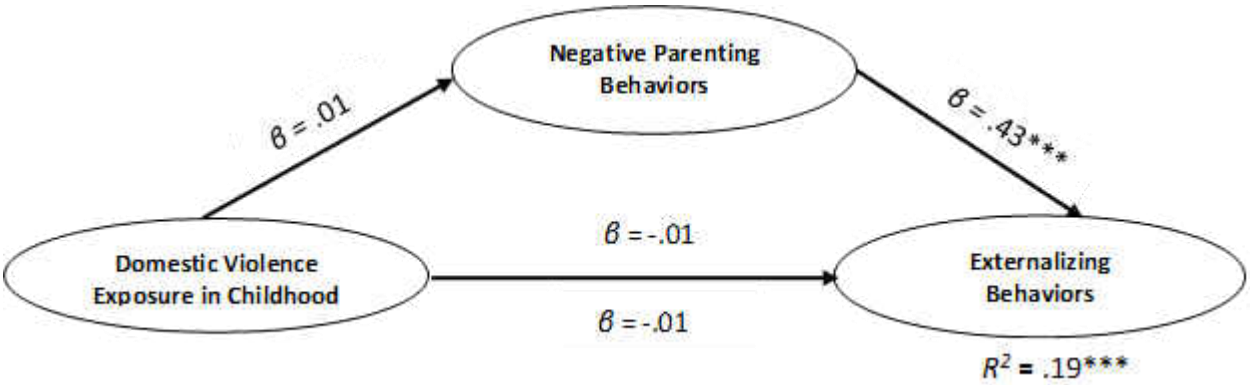


Figure 12. **Mediation model showing results for the relationship between mothers' childhood exposure to domestic violence and negative parenting behaviors predicting young children's externalizing behavior problems**

Mothers' Childhood Exposure to Domestic Violence and Punitive Parenting Behaviors Predicting Young Children's Externalizing Behavior Problems. Given the significant paths from the aforementioned series of regressions, the mediational role of mothers' punitive parenting behaviors was examined in the relationship between childhood exposure to domestic violence and externalizing behavior problems in young children. Collectively, mothers' childhood exposure to domestic violence and punitive parenting behaviors predicted significantly externalizing behavior problems in young children, F (2, 130) = 14.20, $p < .001$, $R^2 = .18$. When entered first, mothers' childhood exposure to domestic violence did not significantly predict externalizing behavior problems in young children ($p < .90$). When mother's punitive parenting behaviors was added to the equation, mothers' childhood exposure to domestic violence remained not predictive of young child eternalizing behavior problems ($p < .74$), but negative/inconsistent parenting behaviors served as a predictor ($p < .001$). As mothers' childhood exposure to domestic violence did not significantly predict punitive parenting in the aforementioned regression analysis, a conclusion of mediation was not warranted. Further, when adjustments were made for family-wise error, no difference in significance was observed, as the

reported *p*-value fell below the Benjamini-Hochberg critical value (c.v.) for this analysis (c.v. = .01). The lack of mediation was confirmed with a nonsignificant Sobel Test ($z = 1.02$, $p < .31$).

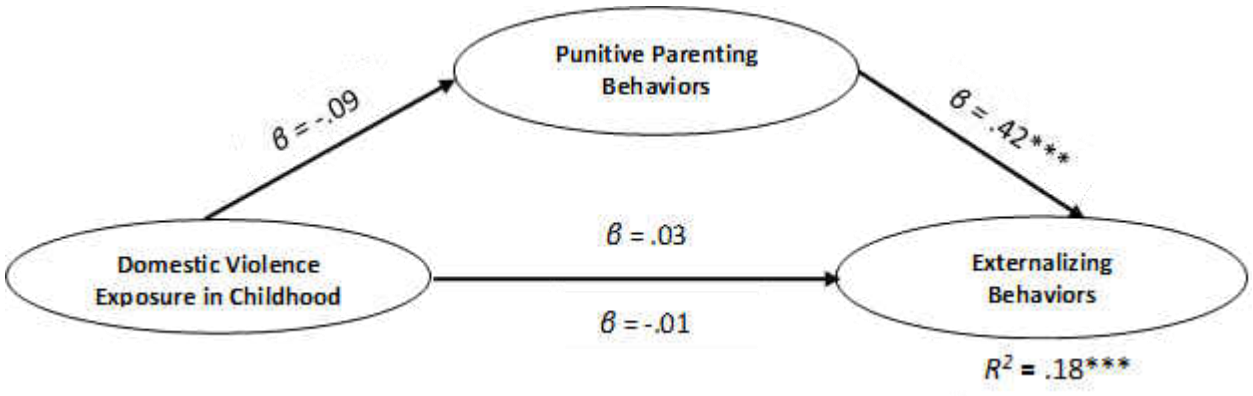


Figure 13. **Mediation model showing results for the relationship between mothers' childhood exposure to domestic violence and punitive parenting behaviors predicting young children's externalizing behavior problems**

PROCESS Models

Overall PROCESS Model

To examine the overall model in the relationship between mothers' childhood exposure to domestic violence and young children's behaviors problems through interpartner violence (PVS; this measure was the only measure of interpartner violence with a significant relationship to childhood exposure to domestic violence) and parenting behaviors (i.e., positive, negative/inconsistent, and punitive), PROCESS (Hayes, 2013) analyses were conducted. PROCESS is a macro added to the Statistical Package for the Social Sciences (SPSS). This macro was designed as a means of performing mediation, moderation, and conditional process analyses using SPSS. See Figure 14 and Figure 15 for a summary of the analyses conducted.

Mothers' Childhood Exposure to Domestic Violence, Interpartner Violence, and Parenting Behaviors Predicting Internalizing Behavior Problems in Young Children. To examine the overall model regarding the relationship between mothers' childhood exposure to domestic violence and internalizing behavior problems in young children through interpartner

violence and parenting behaviors, a PROCESS analysis was performed. For this analysis, interpartner violence (using the PVS), positive parenting behaviors, negative/inconsistent parenting behaviors, and punitive parenting behaviors were entered as potential mediators in the relationship between mothers' childhood exposure to domestic violence and their young children's internalizing behavior problems. Results indicated that mothers' childhood exposure to domestic violence was not predictive of their young children's internalizing behavior problems through either interpartner violence or through positive, negative/inconsistent, or punitive parenting, $F(5, 127) = 1.86$, $p < .18$, $R^2 = .01$. Given that this model was not significantly predictive, the overall mediation model for the relationship between mothers' childhood exposure to domestic violence and young children's internalizing behavior problems through interpartner violence and parenting behaviors was not supported.

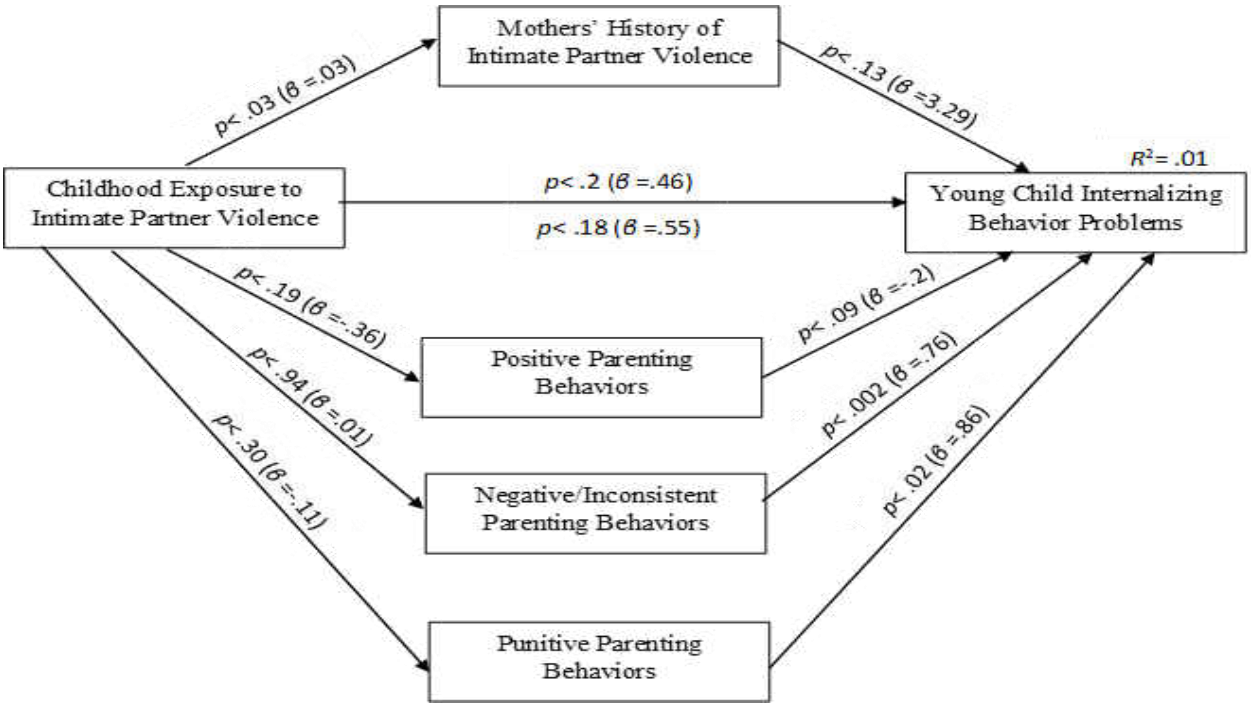


Figure 14. **Model showing the Process analysis conducted on the relationship between mothers' childhood exposure to domestic violence and their young children's internalizing behaviors problems through interpartner violence and parenting behaviors**

Mothers' Childhood Exposure to Domestic Violence, Interpartner Violence, and Parenting Behaviors Predicting Externalizing Behavior Problems in Young Children. To examine the overall model regarding the relationship between mothers' childhood exposure to domestic violence and externalizing behavior problems in young children through interpartner violence and parenting behaviors, a PROCESS analysis was performed. For this analysis, interpartner violence (using the PVS), positive parenting behaviors, negative/inconsistent parenting behaviors, and punitive parenting behaviors were entered as potential mediators in the relationship between mothers' childhood exposure to domestic violence and their young children's externalizing behavior problems. Looking at the results, one would conclude that the model for mothers' exposure to domestic violence was predictive of their young children's externalizing behavior problems through negative/inconsistent parenting behaviors and punitive parenting behaviors, but not through interpartner violence or positive parenting behaviors, $F(5, 127) = 7.64$, $p < .001$, $R^2 = .23$. Further examination of the results from the model suggested, however, that only negative/inconsistent and punitive parenting behaviors were predictive of young child externalizing behavior problems. In other words, the only variables that contributed significantly to the model were negative/inconsistent parenting ($p < .005$) and punitive parenting ($p < .02$). Although this model was significantly predictive of externalizing behavior problems in young children, the overall mediation model for the relationship between mothers' childhood exposure to domestic violence and young children's externalizing behavior problems through interpartner violence and parenting behaviors was not supported.

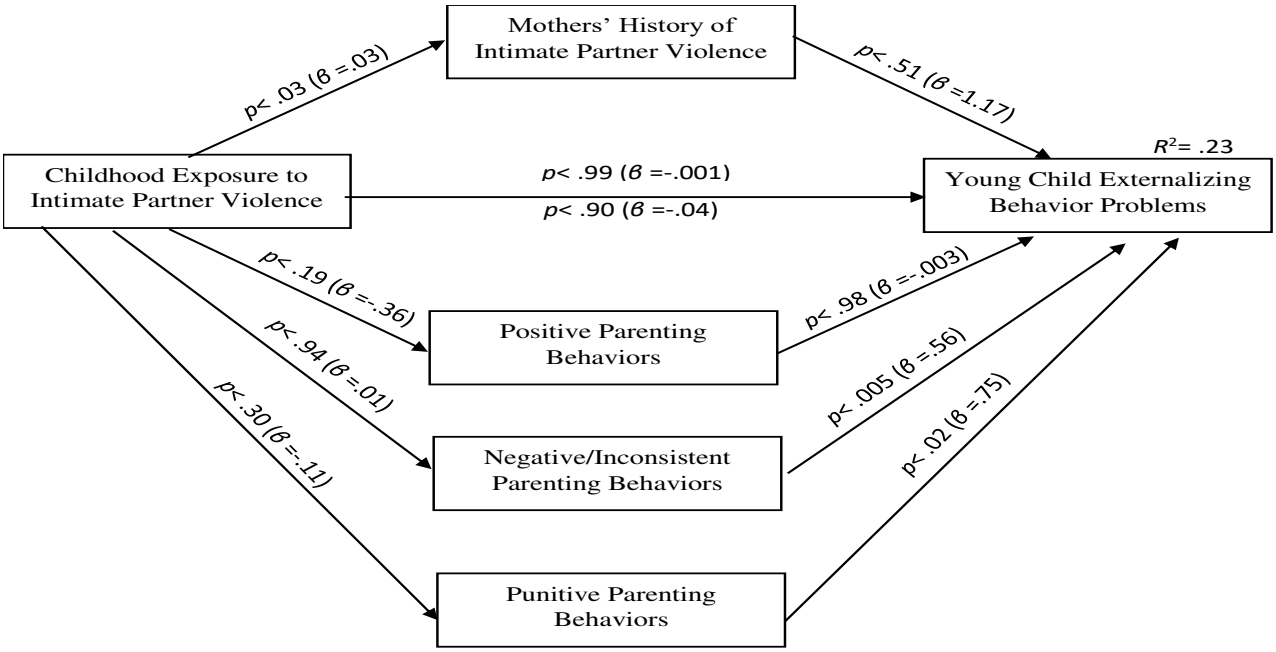


Figure 15. **Model showing the Process analysis conducted on the relationship between mothers' childhood exposure to domestic violence and their young children's externalizing behavior problems through interpartner violence and parenting behaviors**

Post-Hoc Analyses

Looking further at the variables of interest, additional post-hoc analyses were conducted. Given the nature of the data collected for this study, it may be beneficial to engage in further exploration to determine whether young children's behavior problems could be predicted by mothers' interpartner violence in adult relationships through mothers' parenting behaviors. Given that all participants in this study had to report childhood exposure to domestic violence during the screening process for this study, it was assumed that all mothers in this study had such exposure. As a result, post-hoc analyses were conducted on the relationship between mothers' interpartner violence (using the PVS and the WAST) and young children's behavior problems (i.e., internalizing and externalizing behavior problems) as mediated by mothers' parenting behaviors (i.e., positive, negative, and punitive parenting behaviors). Further, both the PVS and WAST were used as measures of interpartner violence because each measure may capture

different experiences of mothers' involvement with interpartner violence. See Figure 16 through Figure 19 for a summary of the results from these analyses.

Mothers' Interpartner Violence and Parenting Behaviors Predicting Young Children's Internalizing Behavior Problems. First, a Process analysis was conducted to examine the relationship between the PVS and young children's internalizing behavior problems through positive, negative/inconsistent, and punitive parenting behaviors. Each of the parenting variables was entered as potential mediators in the relationship between the two constructs. Results from this analysis indicated that the model for the relationship between mothers' history of interpartner violence and young children's internalizing behavior problems through interpartner violence was supported, F (4, 128) = 12.70, p < .001, R^2 = .29. A significant total effect was identified between the PVS and internalizing behavior problems in young children after the parenting variables were entered in the model (p < .03, β= 5.37). In this analysis, negative/inconsistent (p < .001) and punitive (p< .03) parenting behaviors, but not positive parenting (p < . 07) behaviors, were identified as predictors of internalizing behavior problems in young children.

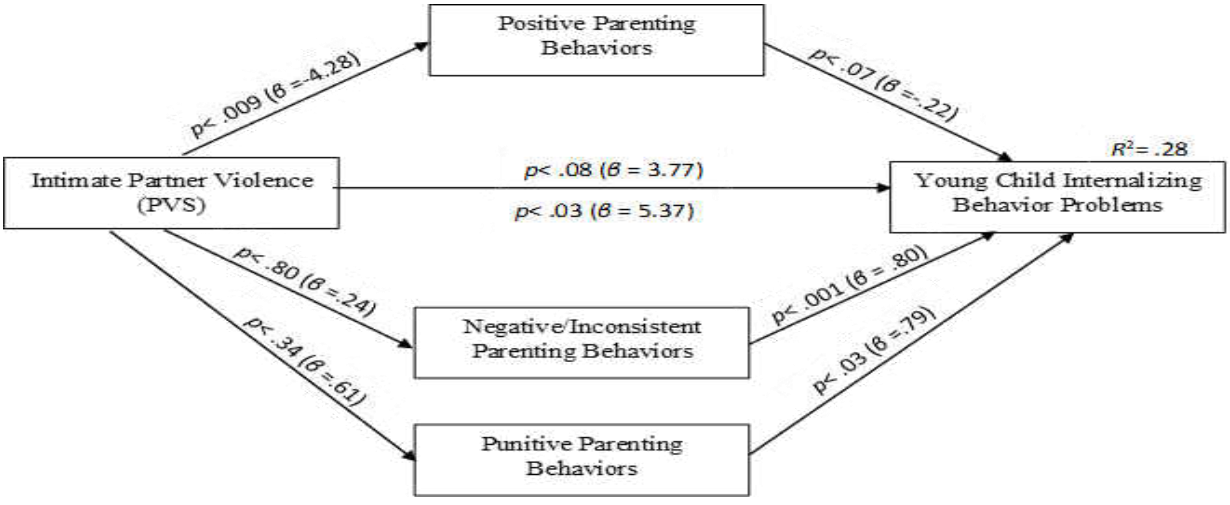


Figure 16. **Diagram showing a summary of results from this analysis**

Next, a Process analysis was conducted to examine the relationship between the WAST and young children's internalizing behavior problems through positive, negative/inconsistent, and punitive parenting behaviors. Each of the parenting variable was entered as potential mediators in the relationship between the two constructs. Results from this analysis indicated that the model for the relationship between mothers' history of interpartner violence and young children's internalizing behavior problems through interpartner violence was supported, F (4, 128) = 11.68, $p < .001$, $R^2 = .27$. A nonsignificant total effect was established between the WAST and internalizing behavior problems in young children after the parenting variables were entered in the model ($p < .13$, $\beta = .59$). In this analysis, positive ($p < .03$) negative ($p < .001$), and punitive ($p < .03$) parenting behaviors were identified as predictors of internalizing behavior problems in young children.

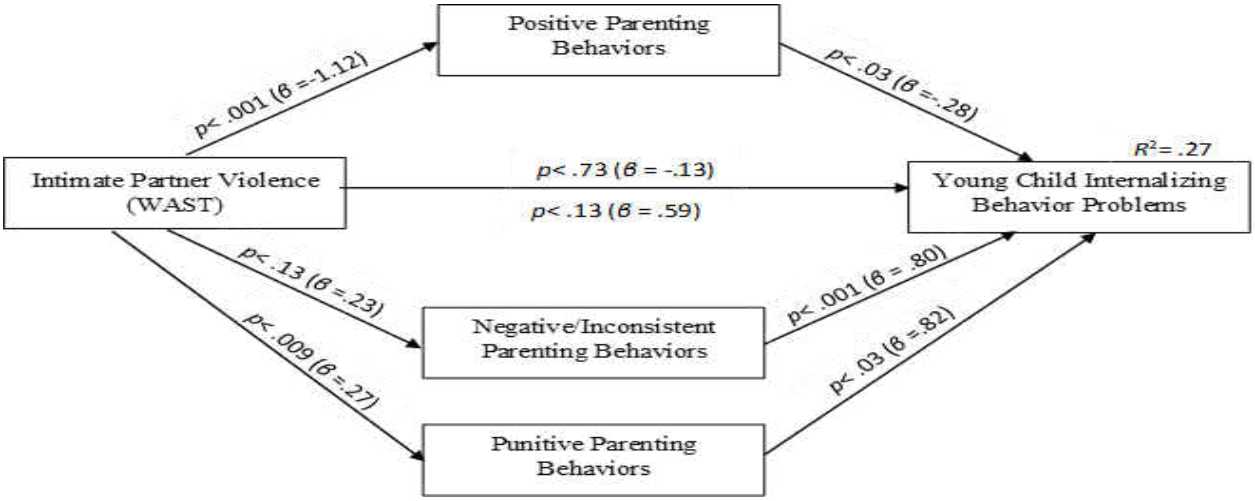


Figure 17. **Diagram showing a summary of results from this analysis**

Mothers' Interpartner Violence and Parenting Behaviors Predicting Young Children's Externalizing Behavior Problems. First, a Process analysis was conducted to examine the relationship between the PVS and young children's externalizing behavior problems through positive, negative/inconsistent, and punitive parenting behaviors. Each of the parenting

variables was entered as potential mediators in the relationship between the two constructs. Results from this analysis indicated that the model for the relationship between mothers' interpartner violence and young children's externalizing behavior problems through interpartner violence was supported, F (4, 128) = 9.63, p < .001, R^2 = .23. A nonsignificant total effect was established between the PVS and externalizing behavior problems in young children after the parenting variables were entered in the model (p = .36, β= 1.75). In this analysis, negative (p < .005) and punitive (p< .01) parenting behaviors, but not positive (p < .98) parenting behaviors, were identified as predictors of externalizing behavior problems in young children.

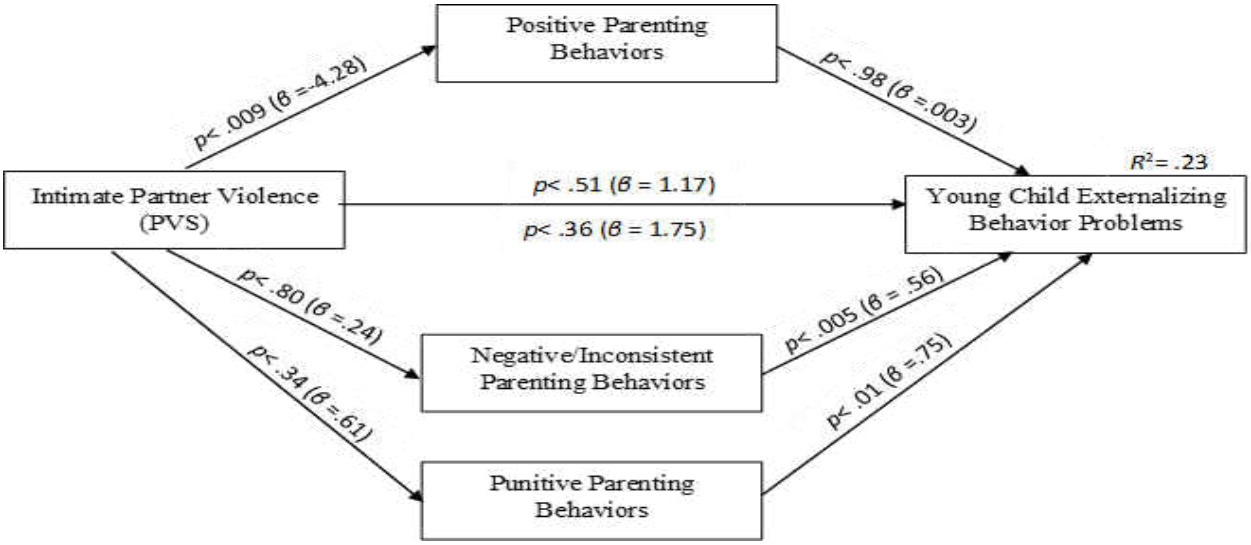


Figure 18. **Diagram showing a summary of results from this analysis**

Next, a Process analysis was conducted to examine the relationship between the WAST and young children's externalizing behavior problems through positive, negative/inconsistent, and punitive parenting behaviors. Each of the parenting variables was entered as potential mediators in the relationship between the two constructs. Results from this analysis indicated that the model for the relationship between mothers' interpartner violence and young children's externalizing behavior problems through interpartner violence was supported, F (4, 128) = 9.87,

$p < .001$, $R^2 = .24$. A significant total effect was established between the WAST and externalizing behavior problems in young children after the parenting variables were entered in the model ($p < .04$, $\beta = .62$). In this analysis, negative ($p < .006$) and punitive ($p < .02$) parenting behaviors, but not positive ($p < .79$) parenting behaviors, were identified as predictors of externalizing behavior problems in young children.

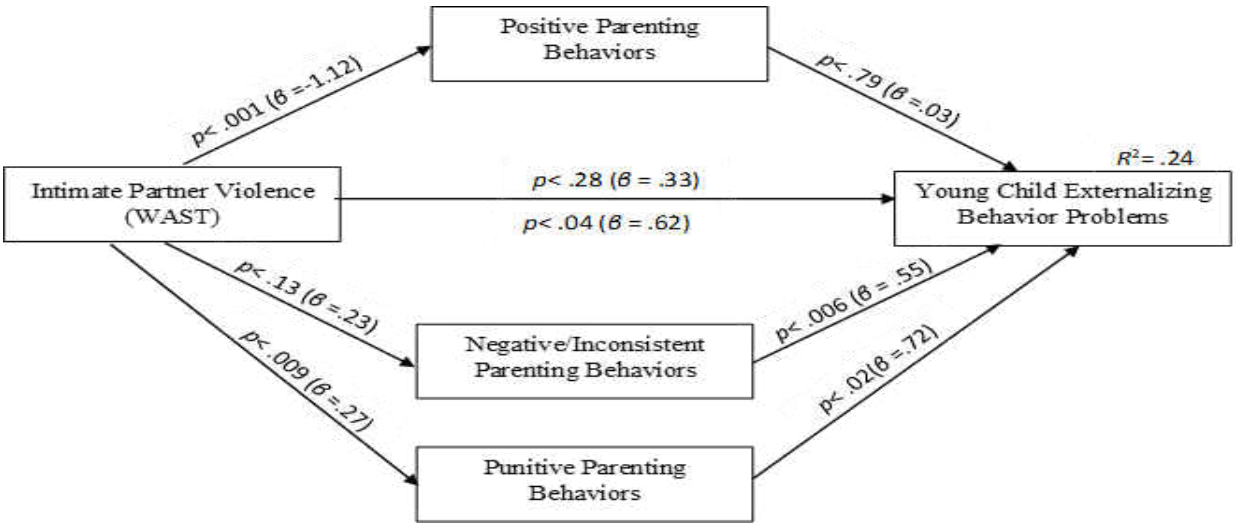


Figure 19. **Diagram showing a summary of results from this analysis**

Exploratory Analyses

Although correlational data suggested that no relationship existed between mothers' childhood exposure to domestic violence and parenting behaviors for the overall sample, further investigation was conducted to examine whether significant group differences existed between two groups of mothers: those who met cut off criteria on the MACE and those who did not meet cut off criteria on the MACE. See Table 3. Because the MACE only accounts for exposure to physical violence in the childhood home, it was warranted to conduct further analyses given that some participants in the study may have reported other childhood exposures to domestic violence (such as verbal and/or physical abuse between parent figures) as part of the entry requirements (as mothers had to endorse childhood exposure to domestic violence to gain entry into the study).

This information may be helpful when determining whether differences between groups exist for mothers who witnessed physical domestic violence in the home versus those mothers who witnessed other kinds of domestic violence. Further exploratory analyses conducted are as follows. About half of the mothers (N=65) met the MACE cut off for domestic violence exposure, whereas 68 mothers did not meet the MACE cut off for domestic violence exposure.

First, the MACE scaled scores were dummy coded to form a grouping variable. A one-way analysis of variance (ANOVA) then was conducted to evaluate whether differences existed between mothers who reported childhood exposure to physical acts of domestic violence on the MACE and mothers who did not report childhood exposure to physical acts of domestic violence on the MACE on their parenting behaviors (i.e. positive-, negative-, and punitive behaviors). Results from the analysis indicated that the two groups did not differ significantly regarding any type of parenting behavior. In particular, mothers who reported childhood exposure to domestic violence did not differ significantly from mothers who did not report childhood exposure to domestic violence when it came to their engagement in positive parenting behaviors, $F(1,131)=1.33$, $p<.25$, negative parenting behaviors, $F(1,131)= 3.46$, $p<.07$, or punitive parenting behaviors, $F(1,131)=.10$, $p<.76$. See Table 7 for summary of ANOVA results.

CHAPTER FOUR: DISCUSSION

The purpose of this study was to examine factors related to the transgenerational cycle of domestic violence in mothers of young children who reported being exposed to domestic violence in their own families of origin. As mothers of young children currently are underrepresented in the research literature, even though early childhood is a critical time of development, it important to identify information that will allow for a better understanding of women who had been exposed to domestic violence during their own childhoods and their own young children. It was hoped that the information collected as part of this study would be helpful for informing future interventions that might be developed for these women and their young children.

Overall, the goal of the present study was to provide a further understanding of the relationships among mothers' childhood exposure to domestic violence, interpartner violence in adulthood, parenting behaviors, and young children's behavior problems. Particularly, the aim was to determine if mothers' childhood exposure to domestic violence predicted future experience with interpartner violence, engagement in maladaptive parenting practices, and behavior problems in their young children. The most important question was whether mothers' childhood exposure to domestic violence would contribute in any way to their young children's expressed behavior problems. The purpose was to find a means of solving at least one piece of the puzzle that could provide scientists and practitioners a better understanding of the transgenerational cycle that domestic violence appears to follow.

Research on this phenomenon was not easy to access, as the literature is still limited regarding the examination of the transgenerational pattern of domestic violence on children using a retrospective approach (Brody et al., 1996; Carlson, 1984; Chemtob & Carlson, 2004; Evans et

al., 2008; Fantuzzo & Mohr, 1999; Jouriles, 2008; Martin, 2002; Straus, 1992; Herrenkohl et al., 2008). Such limitations were even more evident when looking at mothers with young children. When researching this particular population, it was difficult to find studies that focused specifically on young children and their families. That being said, much research was conducted on the relationships between witnessing domestic violence and future involvement in interpartner violence (Breslin et al., 1990; DeBoard-Lucas & Grych, 2011; Ehrensaft et al., 2003; Herrenkohl et al., 2008; Lewis & Fremouw, 2001; Stets & Pirog-Good, 1989), domestic violence and parenting (Anderson & Cramer-Benjamin, 1999; Brody et al., 1996; Fincham et al., 1994), and domestic violence and children's behavior problems (Buckley et al., 2007; Margolin, et al., 2003; McIntosh, 2003, Silvern et al., 1995). Based on the existing literature, it was known that, without a doubt, exposure to domestic violence had negative effects on individuals during childhood (Brody et al., 1996; Carlson, 1984; Chemtob & Carlson, 2004; Evans et al., 2008; Fantuzzo & Mohr, 1999; Jouriles, 2008; Martin, 2002; Straus, 1992) and later in adulthood (Evans et al., 2008).

Overall, the correlational findings of the present study suggested that it was important to examine collectively all the variables of interest, rather than examining the different combinations that already were present in the research literature. Specifically, mothers' exposure to domestic violence in childhood was associated with their later involvement in interpartner violence. These findings supported those of prior research, suggesting that witnessing domestic violence in childhood could increase the likelihood of being involved in interpartner violence later in life (Jackson, 1999; Stets & Pirog-Good, 1989). Additionally, these findings also suggested a transgenerational pattern of exposure to domestic violence. Although mothers' childhood exposure to domestic violence was hypothesized to be associated with interpartner

violence based on the previous literature (Breslin, et al., 1990; Jackson, 1999; Lewis & Fremouw, 2001; Stets & Priog-Good, 1989), the present study provided further empirical support of the relationship between these two constructs.

Mothers' interpartner violence in their adult relationships also was related to their reports of their parenting behaviors and behavior problems in their young children. More specifically, mothers' interpartner violence was associated positively and significantly with both internalizing and externalizing behavior problems in their young children (DeBoard-Lucas & Grych, 2011). Further, correlational findings in the present study also supported the hypotheses that mothers' parenting behaviors were associated significantly with their reports of their young children's behavior problems (Davies & Cummings, 1994). Specifically, positive parenting behaviors were related negatively and significantly to internalizing behavior problems in young children, but both negative/inconsistent and punitive/harsh parenting behaviors were associated positively and significantly with internalizing behavior problems in young children (Brody et al., 1996; Fincham et al., 1994). Further, negative/inconsistent and punitive/harsh parenting behaviors were related positively and significantly to mothers' reports of externalizing behavior problems in their young children (Brody et al., 1996; Fincham et al., 1994).

The relationship between mothers' childhood exposure to domestic violence and specific parenting behaviors still was not understood well, and literature on the relationship between these constructs had not been developed well. Much of the literature supported the relationship between domestic violence and the ways in which mothers and fathers parent their children (Brody et al., 1996; Fincham et al., 1994; Levendosky et al., 2003; Margolin et al., 2003). As a result, this study attempted to explore this relationship further. This study unfortunately was unable to empirically support the direct relationship between mothers' childhood exposure to

domestic violence and their parenting behaviors. Finally, although mothers' childhood exposure to domestic violence was theorized as being associated with young children's behavior problems (Aunola & Nurmi, 2005; Brody et al., 1996; Fincham et al., 1994), the present study was unable to provide empirical evidence to support a direct relationship between these two constructs. It is possible that the linkage between mothers' childhood exposure to domestic violence and their adult interpartner violence holds the key to understanding relationships to these other constructs.

With regard to mothers' experience of interpartner violence in their adult relationships, the presence of interpartner violence was related to mothers' reports of behavior problems in their young children. These findings made sense given the previously documented negative effects of childhood exposure to domestic violence. Although prior research implied a relationship between interpartner violence and maladaptive behaviors in children (Fallin, 2000; Herrenkohl et al., 2008; O'Keefe, 1994), the present study provided empirical support for the relationship between the mothers' history of interpartner violence and the way in which their young children experience behavior problems. After conducting a thorough review of the literature, no information supporting these findings in young children was identified. The findings of the present study, however, were consistent with research suggesting that there was a relationship between children who witness interpartner violence and the experience of behavior problems. Particularly, research suggested that children who had such exposure were more likely to engage in maladaptive behaviors, such as aggressive behaviors (Carlson, 1991; DeBoard-Lucas & Grych, 2011; Jackson, 1999), during adolescence.

Specifically, findings from the present study suggested that, if mothers were involved in interpartner violence, their young children were more likely to exhibit internalizing and/or externalizing behavior problems. Because two different partner violence measures (i.e., the

WAST and PVS) were associated separately with different young child behavior problems (i.e., the PVS predicted internalizing behavior problems, whereas the WAST predicted externalizing behavior problems), it would be beneficial to conduct further analyses to determine what aspects of interpartner violence specifically related to which kinds of behavior problems in young children. Although both of these measures identified women experiencing interpartner violence reliably, the PVS was a shorter screener, whereas the WAST was a longer screening tool. As a result, the kinds of questions, the way in which these questions are asked, and/or the number of questions may contribute to how these two measures differ in their relationships to mothers' reports of their young children's behavior problems.

Many interesting findings were identified regarding mothers' parenting behaviors and their young children's behavior problems. It was understood that, collectively, the way in which individuals parent was associated with the way in which their children behave (Aunola & Nurmi, 2005; Brody et al., 1996; Fincham et al., 1994). Specifically, in support of the proposed hypotheses, positive parenting, negative parenting, and punitive parenting were all predictors of internalizing behavior problems in young children. Particularly, mothers' reports of practicing positive parenting behaviors demonstrated a decrease in the likelihood that mothers would report internalizing behavior problems for their young child, potentially serving a protective function even in the context of childhood exposure to domestic violence. In contrast, both negative/inconsistent and punitive/harsh parenting behaviors were related to an increased likelihood that mothers would report internalizing behavior problems for their young child. With regard to externalizing behavior problems, mothers who reported negative/inconsistent or punitive parenting practices were more likely to also report externalizing behavior problems for their young children.

Collectively, the hypotheses for the present study were supported in that poor parenting behaviors (i.e., negative/inconsistent and punitive/harsh) were related to behavior problems in young children. These findings were consistent with those in the research literature on the relationships between parenting styles and child behavior problems (Brody et al., 1996). Having a parent who engages in unhealthy or maladaptive parenting behaviors can contribute to maladaptive behaviors in young children (Aunola & Nurmi, 2005; Brody et al., 1996; Davies & Cummings, 1994; Fincham et al., 1994). Given the knowledge provided by the present study about the relationship between the ways in which individuals parent their young children and the behavior problems exhibited by these young children, it will be particularly important to address parenting practices when trying to intervene for domestic violence issues with families who have young children.

Finally, an overall model for the prediction of young children's behavior problems in the context of domestic violence exposure was examined. Of the variables in the model, the only predictors that emerged as being related significantly to behavior problems in young children were the poor parenting variables (i.e., negative/inconsistent and punitive/harsh parenting). To understand the potential connections among the variables in the overall model further, mediation analyses were performed on the variables of interest in this study. Among all the mediation models that were examined, only the indirect paths of childhood exposure to domestic violence to young children's internalizing behavior problems through interpartner violence were supported. As a result, the hypothesis regarding the mediating role of interpartner violence in the relationship between mothers' childhood exposure to domestic violence and young children's behavior problems was not supported.

To further examine all the variables in the overall hierarchical model collectively and in the context of potential mediation, various PROCESS models were examined. Findings from these analyses showed that intimate partner violence, positive parenting behaviors, negative/inconsistent parenting behaviors, and punitive parenting behaviors did not serve as mediators in the relationship between mothers' childhood exposure to domestic violence and young child internalizing behaviors or between mothers' childhood exposure to domestic violence and young child externalizing behaviors. As a result, the hypotheses regarding the mediating role of intimate partner violence and/or parenting behaviors in the relationship between mothers' childhood exposure to domestic violence and young children's behavior problems further was not supported.

Retrospective post hoc analyses were conducted to further explore the variables of interest. These analyses were warranted given the nature of the data collected for this study. Given that all mothers were required to report exposure to domestic violence during childhood during the screening process, it was assumed that the mothers included in this study had this experience. The findings from these post hoc analyses indicated that mothers' history of interpartner violence predicted young children's internalizing behavior problems through their parenting behaviors (i.e., negative/inconsistent and punitive parenting behaviors when using the PVS). Further, when using the WAST, no total effect was established. Nonetheless, paths from mothers' history of interpartner violence to young children's internalizing behavior problems through both positive and punitive parenting behaviors was identified, and negative/inconsistent parenting behaviors emerged as a predictor of young children's internalizing behavior problems. Second, the findings from these analyses indicated that mothers' history of interpartner violence predicted young children's externalizing behavior problems through their parenting behaviors

(i.e., punitive parenting behaviors when using the WAST). Further, negative/inconsistent parenting behaviors emerged as a predictor of young children's internalizing behavior problems when using the WAST. Finally, when using the PVS, no total effect was established, but negative/inconsistent and punitive parenting behaviors emerged as a predictors of young children's externalizing behavior problems.

These findings support the idea of a transgenerational cycle of domestic violence. When mothers reported a history of childhood exposure to interpartner violence and later experience interpartner violence themselves, their parenting behaviors may be affected. Given this, it is likely that these parenting behaviors will be related to the problems that their young children exhibit. In other words, parenting behaviors may serve as either protective or risk factors, thereby relating to young children's behavior problems. Given these findings, as was previously discussed, it would be important for future research to identify the differences between the two measures (i.e., PVS and WAST) regarding what aspects of interpartner violence they capture, particularly when examining young children's behavior problems. Responses on the PVS appeared to be more associated with mothers' responses regarding their young children's internalizing behavior problems, whereas responses on the WAST appeared more associated with mothers' responses regarding their young children's externalizing behavior problems.

The findings of the present study should be interpreted within the context of the inherent limitations that exist. For example, it is important to note that, when discussing parenting and young children's behavior problems, the reality is that young children exist within a system. Therefore, when discussing young children's behavior problems, the basis for the analyses conducted was the mothers' report. Given that fathers were not included in the present study, it is possible that fathers' views regarding their young children's behavior problems may differ from

the mothers' views. As a result, future research may benefit from replicating the study with a sample of fathers. Additionally, given that the MACE only includes a small number of items regarding childhood exposure to domestic violence (i.e., childhood exposure to physical violence), it may be helpful to develop or identify other measures that capture other experiences relevant to childhood exposure to domestic violence so that individuals with all kinds of exposure to domestic violence during childhood can be examined.

Self-report measures are used widely in the collection of data for social science research. Given that individuals' self-reports about their behaviors likely always will be included in research, it will be important for researchers to continue working toward understanding better the nuances of self-report as well improving measures completed with self-report, as opposed to only finding weaknesses and replacing self-report measures with external measures (Garcia & Gustavson, 1997). Therefore, although some may consider this method of data collection a limitation, the use of self-report measures is inherent given the nature of attempting to capture or understand better certain constructs or phenomenon in human experience (e.g., individuals' perceptions about themselves or their young children's emotional or behavioral experiences).

Additionally, data for the present study were collected online, without direct observation from researchers. That being said, measures were imposed to decrease the chances of including participants who responded randomly or without effort (e.g., including validity questions and eliminating those who answered these questions incorrectly). With regard to mothers' participation in this study, the sample was relatively homogenous. Particularly, mothers in the study were predominantly married, Caucasian, and relatively well educated with an estimated annual household income of over $70,000 and significant others predominantly holding Bachelor's degrees. Nonetheless, the sample in the present study was relatively representative of

race, ethnicity, and socioeconomic status in the United States. As a result, the findings of the present study may be generalized to some degree to the greater population of individuals within the United States. With that in mind, the findings should be generalized with caution to low income populations, particularly those from African American and Hispanic backgrounds. As a result, future research should investigate childhood exposure to domestic violence, interpartner violence in adult relationships, and parenting practices as predictors of behavior problems in young children for other samples, including mothers in low socioeconomic status groups, mothers from racial/ethnic minority groups, mothers suffering from mental illness, and/or mothers who use or have abused substances or alcohol.

There are so many factors that contribute to the adults whom we become. Specifically, our home environment and the way in which we were parented appeared to play a considerable role (Aunola & Nurmi, 2005; Brody et al., 1996; Fincham et al., 1994). For example, domestic violence has demonstrated a cycle that affects individuals during their childhoods (Carlson, 1984; Chemtob & Carlson, 2004; Nguyen & Larson, 2012; Straus, 1992) and later into adulthood (Buckley et al., 2007; Margolin et al., 2003; McIntosh, 2003). Despite the limitations of the present study, the findings reported here may expand the body of literature regarding the role of childhood exposure to domestic violence in relation to the transgenerational cycle that domestic violence tends to take. The present study approached the phenomenon from a different angle, by specifically looking at childhood exposure to domestic violence in mothers with young children (something that has not been studied previously) as a means of predicting behavior problems in these young children. What causes the shift between what we experience and who we become still needs further investigation. The findings from the present study were consistent with literature on exposure to domestic violence and future engagement in interpartner violence,

suggesting that being exposed to domestic violence in childhood can contribute significantly to experiencing interpartner violence in adulthood (Breslin, Riggs, O'Leary, & Arias, 1990; Jackson, 1999; Jirapramukpitak & Harpham, 2010; Lewis & Fremouw, 2001). These findings will be helpful in establishing a basis for further research on the links that form the transgenerational cycle of domestic violence as well as further identifying risk factors for individuals within this population. Understanding that these factors contribute to the vicious cycle that domestic violence takes is very important. It is necessary to identify these factors early on so that we can better develop interventions and engage in better preventative measures. As a result, we may be able to intervene with families who are displaying these patterns. It is imperative that we step in not only to help those families break the cycle but to save a future generation of young children from being exposed to domestic violence.

Table 1. **Participant Demographic Information**

Variables	**(N=133)**
Mother Age **(in years)**	
Mean (Standard Deviation)	31.31 (5.60)
Child Age **(in years)**	
Mean (Standard Deviation)	3.46 (1.24)
Child Gender **(percent)**	
Male	50.38%
Female	49.62%
Ethnicity **(percent)**	
Caucasian	68.42%
African American	9.02%
Hispanic American	9.02%
Asian American	6.02%
Native American	3.76%
Multiethnic or other	3.76%
Socioeconomic Status **(percent)**	
<$10,000	3.01%
$10,000-$20,000	5.26%
$20,000-$30,000	12.78%
$30,000-$40,000	10.53%
$40,000-$50,000	18.05%
$50,000-$60,000	11.28%
$60,000-$70,000	13.53%
>$70,000	25.26%
Education Level **(percent)**	
High School Diploma	10.53%
Vocational Training	5.26%
Some College	30.83%
Bachelor's Degree	39.1%
Graduate/Professional Training	12.03%
Post-Doctoral Training	2.26%
Marital Status **(percent)**	
Single	8.27%
Living with Partner	21.0%
Married	63.0%
Divorced	6.02%
Widowed	0.75%

Table 2. **Descriptive Statistics for Variables of Interest**

Variables	***M***	***SD***	***AcR.***	***AvR.***
Childhood DV Exposure				
Exposure to Domestic Violence	2.53	3.17	(0-10)	(0-10)
History of Interpartner Violence				
Partner Violence Screen	1.24	.52	(0-3)	(0-3)
Women's Abuse Screening Tool	11.41	3.23	(8-24)	(8-24)
Parenting Behaviors*				
Positive Parenting	50.58	9.88	(12-60)	-
Negative/Inconsistent Parenting	19.17	5.762	(8-34)	-
Punitive/Harsh Parenting	9.37	3.87	(5-21)	-
Young Children's Behavior Problems				
Internalizing Behavior Problems	46.47	14.67	(29-87)	(0-100)
Externalizing Behavior Problems	46.92	11.52	(28-85)	(0-100)

Note. *No available range was identified for these variables. *AcR*. = Actual Range, *AvR*. = Available Range.

Table 3. **Correlations Among Mothers' Childhood Exposure to Domestic Violence, Interpartner violence , Parenting Behaviors, and Young Child Behavior Problems**

Variables	1	2	3	4	5	6	7	8
1. Witnessing Domestic Violence	-							
2. Partner Violence Screen	***.19****	-						
3. Women's Abuse Screening Tool	.12	****.35****	-					
4. Positive Parenting	-.11	****-.23****	****-.37****	-				
5. Negative/Inconsistent Parenting	.01	.02	.13	.01	-			
6. Punitive/Harsh Parenting	-.09	.08	****.23****	****-.20****	****.60****	-		
7. Internalizing Behavior Problems	.12	***.19****	.13	****-.22****	****.44****	****.43****	-	
8. Externalizing Behavior Problems	-.01	.08	****-.18****	-.06	****.43****	****.42****	****.72****	-

Note. * $p < .05$, ** $p < .01$, *Italics* correspond to correlations found non-significant after controlling for family-wise error (i.e., using Bonferroni adjustment of $p \leq .002$).

Table 4. **Regression Analyses for Parenting Behaviors Predicting Young Child Behavior Problems**

Regression/Variables	***β***	***t***	***P***
Parenting Behaviors and Internalizing Behavior Problems: $F(3,129)=15.65$, $p<.001$, $R^2=.27$			
Positive Parenting Behaviors	-.18	-2.26	.03*
Negative Parenting Behaviors	.31	3.28	.001***
Punitive Parenting Behaviors	.21	2.18	.03*
Parenting Behaviors and Externalizing Behavior Problems: $F(3,129)=12.74$, $p<.001$, $R^2=.23$			
Positive Parenting Behaviors	-.01	-.12	.91
Negative Parenting Behaviors	.28	2.90	.005**
Punitive Parenting Behaviors	.25	2.54	.01**

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 5. **Hierarchical Regression Analyses for Overall Model Predicting Internalizing Behavior Problems**

Variables	***B***	**SE**	***β***
Block 1. $F(1, 131) = 1.86$, $p = .18$, $R^2 = .01$			
DV Exposure During Childhood	.54	.40	.12
Block 2. $F(3, 129) = 2.16$, $p = .10$, $R^2 = .05$			
DV Exposure During Childhood	.38	.41	.08
Partner Violence Screen	4.29	2.60	.15
Woman Abuse Screening Tool	.30	.42	-.07
Block 3. $F(6, 126) = 8.94$, $p < .001$, $R^2 = .30$			
DV Exposure During Childhood	.48	.36	.10
Partner Violence Screen	3.91	2.27	.14
Woman Abuse Screening Tool	-.38	.39	-.08
Positive Parenting Behaviors	-.24	.12	-.16
Negative Parenting Behaviors	.78	.24	.21**
Punitive Parenting Behaviors	.90	.37	.24*

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 6. **Hierarchical Regression Analyses Predicting Externalizing Behavior Problems**

Variables	***B***	**SE**	***β***
Block 1. $F(1, 131) = .017$, $p = .90$, $R^2 = .00$			
DV Exposure During Childhood	-.41	.32	-.01
Block 2. $F(3, 129) = 2.16$, $p = .24$, $R^2 = .05$			
DV Exposure During Childhood	-.13	.32	-.04
Partner Violence Screen	.58	2.06	.03
Woman Abuse Screening Tool	.61	.33	.17
Block 3. $F(6, 126) = 6.51$, $p < .001$, $R^2 = .24$			
DV Exposure During Childhood	-.02	.29	-.00
Partner Violence Screen	.68	1.86	.03
Woman Abuse Screening Tool	.30	.32	.08
Positive Parenting Behaviors	.03	.20	.28
Negative Parenting Behaviors	.55	.20	.28**
Punitive Parenting Behaviors	.72	.31	.24*

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 7. ***Summary of One-Way Analysis of Variance in Parenting Behaviors by Childhood Exposure to Domestic Violence***

Source	*df*	*SS*	*MS*	*F*	*p*
Positive Parenting * Childhood Exposure to Domestic Violence					
Between Groups	1	129.62	129.62	1.33	.25
Within Groups	131	12750.81	97.33		
Total	132	12880.42			
Negative Parenting * Childhood Exposure to Domestic Violence					
Between Groups	1	112.88	112.88	3.46	.07
Within Groups	131	4269.48	32.59		
Total	132	4382.36			
Punitive Parenting * Childhood Exposure to Domestic Violence					
Between Groups	1	1.45	1.45	.10	.76
Within Groups	131	1973.50	15.07		
Total	132	1974.95			

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

APPENDIX A: EXPLANATION OF RESEARCH FORM

Appendix A: Explanation of Research Form

Childhood Experiences and Relationships in Adulthood

Informed Consent

Principal Investigator: Kimberly Renk

Student Investigator: J'Nelle Stephenson, M.A.

Faculty Supervisor: Kimberly Renk, Ph.D.

Investigational Site: University of Central Florida, Department of Psychology

Introduction: Researchers at the University of Central Florida (UCF) study many topics. To do this, we need the help of people who agree to take part in a research study. You are being invited to take part in a research study, which will include up to 125 parents from the United States. You must be 18-years of age or older and have a child between the ages of 1.5- to 5-years to be included in the research study.

The persons doing this research include J'Nelle Stephenson, M.A., a Graduate Student in the Clinical Psychology Ph.D. Program at the University of Central Florida, and Kimberly Renk, Ph.D., an Associate Professor of Psychology at UCF.

What you should know about a research study:

- Someone will explain this research study to you.
- A research study is something you volunteer for.
- Whether or not you take part is up to you.
- You should take part in this study only because you want to.
- You can choose not to take part in the research study.
- You can agree to take part now and later change your mind.
- Whatever you decide it will not be held against you.
- Feel free to ask all the questions you want before you decide.

Purpose of the research study: The purpose of this study is to explore the retrospective experience of childhood exposure to domestic violence. In fact, it is suggested that childhood exposure to domestic violence may lead to difficult intimate relationships and difficult parenting behaviors. By understanding these relationships further, health service providers will be able to better identify and intervene in the lives of children and parents who have been in domestically

violent situations. The cycle of domestic violence across family generations needs to end, and the aspects that would appear to be most influential in the cycle need further exploration.

What you will be asked to do in the study: As part of this study, you will be asked to complete ten brief questionnaires about your experiences as a child in your childhood home, your perceptions of your child and your perceptions of your parenting. Completion of these questionnaires will take approximately one hour of your time. Amazon Mechanical Turk provides a link to the surveys. Your responses as part of this study will be used to examine the relationships between domestic violence exposure in childhood and relationship functioning and parenting behaviors.

Location: Research for this project will be conducted online. You will be asked to fill out questionnaires on a secure online survey site.

Time Required: We expect that you will participate in this research study for approximately one hour.

Risks: Although there are no anticipated risks that accompany your participation in this research study, it should be noted that some of the questionnaires that you will complete may bring up negative or unpleasant experiences from your childhood. Should you have a negative emotional reaction to any of the material presented, please notify the investigator or the faculty investigator listed on this form. In addition, you should consider obtaining counseling assistance or psychological treatment if such help is needed as a result of participation in the study. For help obtaining such services near you, you may wish to consult your insurance provider or contact your general practitioner for a referral. In addition, you may visit the American Psychological Association website at http://locator.apa.org/ to find a psychologist near you. If you are located in the Central Florida area, you may wish to contact the UCF Psychology Clinic at 407-823-4348.

Benefits: One benefit of participating in this project is that you will learn first-hand what it is like to participate in a research project and you may learn more about yourself. For example, by completing the questionnaire packet, you will increase your awareness of how you parent your child(ren), your child's behavior and your perception of your child's behavior, your ability to reflect on your child's behavior, how your past experiences may affect your current emotional and behavioral functioning with your child, and your current and past intimate relationship functioning.

Compensation or Payment: Participants can expect to spend approximately one hour completing ten questionnaires. You will receive $1.00 through Amazon Mechanical Turk for your participation.

Confidentiality: We will limit your personal data collected in this study to people who have a need to review this information. This only includes basic demographic information. No names and identifying information will be collected. We cannot promise complete confidentiality. Organizations that may inspect and copy your information include the IRB and other representatives of UCF. You can be assured that we will not be able to link your identity to your responses, however, as we will not be asking you for your name as part of this consent process.

Upon completion of the online surveys, your responses will be linked with an identification number only. The investigators will then transfer your survey responses from the secure online server to an SPSS database that only the investigators will be able to access via a password protected computer. Your online survey responses then will be deleted from the secure online server. Thus, your responses will be entirely anonymous. **Study contact for questions about the study or to report a problem:** If you have questions, concerns, or complaints or think the research has hurt you, talk to Kimberly Renk, Ph.D., Faculty Supervisor, Department of Psychology, at 407-823-2218 or by email at Kimberly.Renk@.ucf.edu.

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901. You may also talk to them for any of the following:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You want to get information or provide input about this research.

Withdrawing from the study: There are no adverse consequences for choosing to withdraw from your participation in the study. The person in charge of the research study or the sponsor can remove you from the research study without your approval if you are not 18-years of age or older.

If you agree to participate in this research study, please click continue below.

"Thank you for agreeing to participate in our research. Before you begin, please note that the data you provide may be collected and used by Amazon as per its privacy agreement. This agreement shall be interpreted according to United States law."

APPENDIX B: POST PARTICIPATION INFORMATION

Appendix B: Post Participation Question

PROJECT: Childhood Experiences and Relationships in Adulthood
INVESTIGATORS: Kimberly Renk, Ph.D., & J'Nelle Stephenson, M.A.

Thank you for participating in this research project. This project is being conducted so that we may find out more about the relationship between retrospective experience of childhood exposure to parents' domestic violence and later relationship functioning and parenting behaviors. The findings may also provide information about the outcomes for children who have parents with childhood experiences of parents' domestic violence. As part of your participation, you completed several questionnaires inquiring about your past negative childhood experiences (including domestic violence exposure), your current and past experiences in romantic relationships, the way in which you parent your child, the way you interact with your child, your perception of your child's behaviors, and your child's behavioral and emotional functioning. The responses to these questionnaires will be used to explore the relationships among the aforementioned variables. In particular, we are expecting that parents who report have been exposed to parents' domestic violence in childhood will also experience difficulties with maintaining healthy romantic relationships, difficulty with parenting their children, and difficultly reflecting on their own experiences and those of their children. In addition, we are expecting that childhood exposure to parents' domestic violence, through each of these variables, may affect children of these parents in challenging ways. We hope that any documented relationships among these variables may inform us about possible points of intervention for individuals with past exposure to domestic violence.

If you would like more information about domestic violence exposure and relationship functioning, parenting behaviors, reflective functioning, and child outcomes, please refer to the following sources:

Chemtob, C. M., & Carlson, J. G. (2004). Psychological effects of domestic violence on children and their mothers. *International Journal of Stress Management, 11*(3), 209-226. doi:10.1037/1072-5245.11.3.209

Fonagy, P., & Target, M. (1997). Attachment and reflective function: Their role in self-organization. *Development and Psychopathology, 9*(4), 679-700. doi:10.1017/S0954579497001399

Levendosky, A. A., Huth-Bocks, A. C., Shapiro, D. L., & Semel, M. A. (2003). The impact of domestic violence on the maternal-child relationship and preschool-age children's functioning. *Journal of Family Psychology, 17*(3), 275-287. doi:10.1037/0893-3200.17.3.275

If you have any further questions about this research study, please contact Kimberly Renk, Ph.D., by phone (407-823-2218) or e-mail (Kimberly.Renk@ucf.edu). If you feel that you would benefit from talking with a counselor about your own childhood experiences, you may visit the American Psychological Association website at http://locator.apa.org/ to find a psychologist near you.

APPENDIX C: DEMOGRAPHICS QUESTIONNAIRE

Appendix C: Demographics Questionnaire

1. **Your Gender:** M F

2. **Your Age:** _____

3. **Your Ethnicity:** Caucasian Hispanic African-American

   Asian-American Native-American Other_____

4. **What, if any, is your religious affiliation?** _____

   On a scale of 1-10 (1 = not strong at all; 10 = very strong) how strong of a religious affiliation would you say you have? _____

5. **Your Marital Status:** Married Divorced Separated Widowed Single

   Living with Partner Remarried (If so, how many previous marriages_____)

6. **Does your child's other parent live with you?** Yes No

7. **Please list the age and gender of your child(ren) and whether or not they live with you.**

Age	**Gender**	**Live with you?**	**Born at how many weeks gestation?**
____	M F	Y N	____
____	M F	Y N	____
____	M F	Y N	____
____	M F	Y N	____

8. **Do you live with any extended family members or friends?** Y N

9. **If yes, who?** _____

10. **Your level of education:**

    Post Doctorate Vocational Training

    Graduate Professional Training High School Diploma

    College Degree (bachelors) Some High School

    Some College Less than High School

11. **Your occupation:** _____

12. Child's other parent's level of education:

Post Doctorate	Vocational Training
Graduate Professional Training	High School Diploma
College Degree (bachelors)	Some High School
Some College	Less than High School

13. Your child's other parent's occupation: _____

14. Estimated Yearly household income (please circle one):

Less than $10,000	$40,000 - $50,000
$10,000 - $20,000	$50,000 - $60,000
$20,000 - $30,000	$60,000 - $70,000
$30,000 - $40,000	More than $70,000

15. Estimated debt (please circle one):

Less than $10,000	$40,000 - $50,000
$10,000 - $20,000	$50,000 - $60,000
$20,000 - $30,000	$60,000 - $70,000
$30,000 - $40,000	More than $70,000

APPENDIX D: MALTREATMENT AND CHRONOLOGY OF EXPOSURE

Appendix D: Maltreatment and Chronology of Exposure

	Sometimes parents, stepparents or other adults living in the house do hurtful things. If this happened during your childhood (first 18 years of your life), please check 'Yes'. If this did not happen in your childhood, please check 'No.'		
1.	Swore at you, called you names, said insulting things like your "fat", "ugly", "stupid", etc. more than a few times a year.	❍Yes$_1$	❍No$_0$
2.	Said hurtful things that made you feel bad, embarrassed or humiliated more than a few times a year.	❍Yes$_1$	❍No$_0$
3.	Acted in a way that made you afraid that you might be physically hurt.	❍Yes$_1$	❍No$_0$
4.	Threatened to leave or abandon you.	❍Yes	❍No$_0$
5.	Locked you in a closet, attic, basement or garage.	❍Yes$_1$	❍No$_0$
6.	Intentionally pushed, grabbed, shoved, slapped, pinched, punched or kicked you.	❍Yes$_1$	❍No$_0$
7.	Hit you so hard that it left marks for more than a few minutes.	❍Yes$_1$	❍No$_0$
8.	Hit you so hard, or intentionally harmed you in some way, that you received or should have received medical attention.	❍Yes$_1$	❍No$_0$
9.	Spanked you on your buttocks, arms or legs.	❍Yes	❍No$_0$
10.	Spanked you on your bare (unclothed) buttocks.	❍Yes$_1$	❍No$_0$
11.	Spanked you with an object such as a strap, belt, brush, paddle, rod, etc.	❍Yes$_1$	❍No$_0$
12.	Made inappropriate sexual comments or suggestions to you.	❍Yes$_1$	❍No$_0$
13.	Touched or fondled your body in a sexual way.	❍Yes$_1$	❍No$_0$
14.	Had you touch their body in a sexual way.	❍Yes$_1$	❍No$_0$

	Sometimes parents, stepparents or other adults living in the house do hurtful things to your <u>siblings</u> (brother, sister, stepsiblings). If this happened during your childhood (first 18 years of your life), please check 'Yes'. If this did not happen in your childhood, please check 'No.'		
15.	Hit your sibling (stepsibling) so hard that it left marks for more than a few minutes.	❍ Yes$_1$	❍ No$_0$
16.	Hit your sibling (stepsibling) so hard, or intentionally harmed him/her in some way, that he/she received or should have received medical attention.	❍ Yes$_1$	❍ No$_0$
17.	Made inappropriate sexual comments or suggestions to your sibling (stepsibling).	❍ Yes$_1$	❍ No$_0$
18.	Touched or fondled your sibling (stepsibling) in a sexual way.	❍ Yes$_1$	❍ No$_0$
	Sometimes adults or older individuals NOT living in the house do hurtful things to you. **If this happened during your childhood (first 18 years of your life), please check 'Yes'. If this did not happen in your childhood, please check 'No.'**		
19.	Had you touch their body in a sexual way.	❍ Yes$_1$	❍ No$_0$
20.	Actually had sexual intercourse (oral, anal or vaginal) with you.	❍ Yes$_1$	❍ No$_0$
	Sometimes intense arguments or physical fights occur between parents, stepparents or other adults (boyfriends, girlfriends, grandparents) living in the household. **If this happened during your childhood (first 18 years of your life), please check 'Yes'. If this did not happen in your childhood, please check 'No.'**		
21.	Saw adults living in the household push, grab, slap or throw something at your mother (stepmother, grandmother).	❍ Yes$_1$	❍ No$_0$

22.	Saw adults living in the household hit your mother (stepmother, grandmother) so hard that it left marks for more than a few minutes.	❍ Yes$_1$	❍ No$_0$
23.	Saw adults living in the household hit your mother (stepmother, grandmother) so hard, or intentionally harm her in some way, that she received or should have received medical attention.	❍ Yes$_1$	❍ No$_0$
24.	Saw adults living in the household push, grab, slap or throw something at your father (stepfather, grandfather).	❍ Yes$_1$	❍ No$_0$
25.	Saw adults living in the household hit your father (stepfather, grandfather) so hard that it left marks for more than a few minutes.	❍ Yes$_1$	❍ No$_0$
	Sometimes children your own age or older do hurtful things like bully or harass you. **If this happened during your childhood (first 18 years of your life), please check 'Yes'. If this did not happen in your childhood, please check 'No.'**		
26.	Swore at you, called you names, said insulting things like your "fat", "ugly", "stupid", etc. more than a few times a year.	❍ Yes$_1$	❍ No$_0$
27.	Said hurtful things that made you feel bad, embarrassed or humiliated more than a few times a year.	❍ Yes$_1$	❍ No$_0$
28.	Said things behind your back, posted derogatory messages about you, or spread rumors about you.	❍ Yes$_1$	❍ No$_0$
29.	Intentionally excluded you from activities or groups.	❍ Yes$_1$	❍ No$_0$
30.	Acted in a way that made you afraid that you might be physically hurt.	❍ Yes$_1$	❍ No$_0$
31.	Threatened you in order to take your money or possessions.	❍ Yes$_1$	❍ No$_0$
32.	Forced or threatened you to do things that you did not want to do.	❍ Yes$_1$	❍ No$_0$
33.	Intentionally pushed, grabbed, shoved, slapped, pinched, punched, or kicked you.	❍ Yes$_1$	❍ No$_0$
33.	Hit you so hard that it left marks for more than a few minutes.	❍ Yes$_1$	❍ No$_0$

35.	Hit you so hard, or intentionally harmed you in some way, that you received or should have received medical attention.	❍ Yes$_1$	❍ No$_0$
36.	Forced you to engage in sexual activity against your will.	❍ Yes$_1$	❍ No$_0$
37.	Forced you to do things sexually that you did not want to do.	❍ Yes$_1$	❍ No$_0$
	Please indicate if the following happened during your childhood (first 18 years of your life). **If this happened during your childhood (first 18 years of your life), please check 'Yes'. If this did not happen in your childhood, please check 'No.'**		
38.	You felt that your mother or other important maternal figure was present in the household but emotionally unavailable to you for a variety of reasons like drugs, alcohol, workaholic, having an affair, heedlessly pursuing their own goals.	❍ Yes$_1$	❍ No$_0$
39.	You felt that your father or other important paternal figure was present in the household but emotionally unavailable to you for a variety of reasons like drugs, alcohol, workaholic, having an affair, heedlessly pursuing their own goals.	❍ Yes$_1$	❍ No$_0$
40.	A parent or other important parental figure was very difficult to please.	❍ Yes$_1$	❍ No$_0$
41.	A parent or other important parental figure did not have the time or interest to talk to you.	❍ Yes$_1$	❍ No$_0$
42.	One or more individuals in your family made you feel loved.	❍ Yes$_1$	❍ No$_0$
43.	One or more individuals in your family helped you feel important or special.	❍ Yes$_1$	❍ No$_0$
44.	One or more individuals in your family were there to take care of you and protect you.	❍ Yes$_1$	❍ No$_0$
45.	One or more individuals in your family were there to take you to the doctor or Emergency Room if the need ever arose, or would have if needed.	❍ Yes$_1$	❍ No$_0$
	Please indicate if the following statements were true about you and your family during your childhood. **If this happened during your childhood (first 18 years of your life), please check 'Yes'. If this did not happen in your childhood, please check 'No.'**		

46.	You didn't have enough to eat.	❍ Yes$_1$	❍ No$_0$
47.	You had to wear dirty clothes.	❍ Yes$_1$	❍ No$_0$
48.	You felt that you had to shoulder adult responsibilities.	❍ Yes$_1$	❍ No$_0$
49.	You felt that your family was under severe financial pressure.	❍ Yes$_1$	❍ No$_0$
50.	One or more individuals kept important secrets or facts from you.	❍ Yes$_1$	❍ No$_0$
51.	People in your family looked out for each other.	❍ Yes$_1$	❍ No$_0$
52.	Your family was a source of strength and support.	❍ Yes$_1$	❍ No$_0$

APPENDIX E: PARTNER VIOLENCE SCREEN

Appendix E: Partner Violence Screen

1. Have you been hit, kicked, punched, or otherwise hurt by someone within the past year? If so, by whom?

2. Do you feel safe in your current relationship?

3. Is there a partner from a previous relationship who is making you feel unsafe now?

APPENDIX F: WOMAN ABUSE SCREENING TOOL

Appendix F: Woman Abuse Screening Tool

1. In general, how would you describe your relationship?
   - □ a lot of tension
   - □ some tension
   - □ no tension
2. Do you and your partner work out arguments with:
   - □ great difficulty
   - □ some difficulty
   - □ no difficulty
3. Do arguments ever result in you feeling down or bad about yourself?
   - □ often
   - □ sometimes
   - □ never
4. Do arguments ever result in hitting, kicking or pushing?
   - □ often
   - □ sometimes
   - □ never
5. Do you ever feel frightened by what your partner says or does?
   - □ often
   - □ sometimes
   - □ never
6. Has your partner ever abused you physically?
   - □ often
   - □ sometimes
   - □ never
7. Has your partner ever abused you emotionally?
   - □ often
   - □ sometimes
   - □ never
8. Has your partner ever abused you sexually?
   - □ often
   - □ sometimes
   - □ never:

APPENDIX G: ALABAMA PARENTING QUESTIONNAIRE PRESCHOOL REVISION

Appendix G: Alabama Parenting Questionnaire Preschool Revision

Alabama Parenting Questionnaire-Preschool Version (APQ-PR)

Please indicate how often you do/feel each of the following behaviors/feelings.

Scores range from 1 (*never*) to 5 (*always*).

1. _____You have a friendly talk with your child.
2. _____You volunteer to help with special activities that your child is involved in.
3. _____You play games or do other fun things with your child.
4. _____You ask your child about his/her day in school.
5. _____You help your child with his/her homework.
6. _____You compliment your child when he/she does something well.
7. _____You praise your child if he/she behaves well.
8. _____You hug or kiss your child when he/she has done something well.
9. _____You talk to your child about his/her friends.
10. _____You tell your child that you like it when he/she helps around the house.
11. _____You calmly explain to your child why his/her behavior was wrong when he/she misbehaves.
12. _____You let your child know when he/she is doing a good job with something.
13. _____You threaten to punish your child and then do not actually punish him/her.
14. _____Your child talks you out of being punished after he/she has done something wrong.
15. _____You feel that getting your child to obey you is more trouble than it's worth.
16. _____You let your child out of a punishment early (e.g., lift restrictions earlier than you originally said).

17. _____ You get so busy that you forget where your child is and what he/she is doing.
18. _____ Your child is not punished when he/she has done something wrong.
19. _____ The punishment you give your child depends on your mood.
20. _____ You spank your child with your hand when he/she has done something wrong
21. _____ You ignore your child when he/she is misbehaving.
22. _____ You slap your child when he/she has done something wrong.
23. _____ You hit your child with a belt, switch, or other object when he/she has done something wrong.
24. _____ You yell or scream at your child when he/she has done something wrong
25. _____ You reward or give something extra to your child for obeying you or behaving well.
26. _____ You drive your child to a special activity.
27. _____ You attend PTA meetings, parent/teacher conferences, or other meetings at your child's school.
28. _____ You don't tell your child where you are going.
29. _____ Your child is at home without adult supervision.
30. _____ You take away privileges or money from your child as a punishment.
31. _____ You send your child to his/her room as a punishment.
32. _____ You use time out (make him/her sit or stand in comer) as a punishment.

APPENDIX H: CHILD BEHAVIOR CHECKLIST AGES 1.5 TO 5 YEARS

Appendix H: Child Behavior Checklist Ages 1.5 to 5 years

Please print. **CHILD BEHAVIOR CHECKLIST FOR AGES 1½-5**

For office use only
ID #

CHILD'S FULL NAME: First Middle Last

CHILD'S GENDER ☐ Boy ☐ Girl | CHILD'S AGE | CHILD'S ETHNIC GROUP OR RACE

TODAY'S DATE Mo._____ Day_____ Year_____

CHILD'S BIRTHDATE Mo._____ Day_____ Year_____

Please fill out this form to reflect *your* view of the child's behavior even if other people might not agree. Feel free to write additional comments beside each item and in the space provided on page 2. ***Be sure to answer all items.***

PARENTS' USUAL TYPE OF WORK, even if not working now. *Please be specific — for example, auto mechanic, high school teacher, homemaker, laborer, lathe operator, shoe salesman, army sergeant.*

FATHER'S TYPE OF WORK _____

MOTHER'S TYPE OF WORK _____

THIS FORM FILLED OUT BY: (print your full name)

_____

Your relationship to child:

☐ Mother ☐ Father ☐ Other (specify):

Below is a list of items that describe children. For each item that describes the child ***now or within the past 2 months***, please circle the ***2*** if the item is ***very true or often true*** of the child. Circle the ***1*** if the item is ***somewhat or sometimes true*** of the child. If the item is ***not true*** of the child, circle the ***0***. Please answer all items as well as you can, even if some do not seem to apply to the child.

0 = Not True (as far as you know) 1 = Somewhat or Sometimes True 2 = Very True or Often True

0 1 2 1. Aches or pains (without medical cause; ***do not*** include stomach or headaches)
0 1 2 2. Acts too young for age
0 1 2 3. Afraid to try new things
0 1 2 4. Avoids looking others in the eye
0 1 2 5. Can't concentrate, can't pay attention for long
0 1 2 6. Can't sit still, restless, or hyperactive
0 1 2 7. Can't stand having things out of place
0 1 2 8. Can't stand waiting; wants everything now
0 1 2 9. Chews on things that aren't edible
0 1 2 10. Clings to adults or too dependent
0 1 2 11. Constantly seeks help
0 1 2 12. Constipated, doesn't move bowels (when not sick)
0 1 2 13. Cries a lot
0 1 2 14. Cruel to animals
0 1 2 15. Defiant
0 1 2 16. Demands must be met immediately
0 1 2 17. Destroys his/her own things
0 1 2 18. Destroys things belonging to his/her family or other children
0 1 2 19. Diarrhea or loose bowels (when not sick)
0 1 2 20. Disobedient
0 1 2 21. Disturbed by any change in routine
0 1 2 22. Doesn't want to sleep alone
0 1 2 23. Doesn't answer when people talk to him/her
0 1 2 24. Doesn't eat well (describe): _____
0 1 2 25. Doesn't get along with other children
0 1 2 26. Doesn't know how to have fun; acts like a little adult
0 1 2 27. Doesn't seem to feel guilty after misbehaving
0 1 2 28. Doesn't want to go out of home
0 1 2 29. Easily frustrated
0 1 2 30. Easily jealous
0 1 2 31. Eats or drinks things that are not food—***don't*** include sweets (describe): _____
0 1 2 32. Fears certain animals, situations, or places (describe): _____
0 1 2 33. Feelings are easily hurt
0 1 2 34. Gets hurt a lot, accident-prone
0 1 2 35. Gets in many fights
0 1 2 36. Gets into everything
0 1 2 37. Gets too upset when separated from parents
0 1 2 38. Has trouble getting to sleep
0 1 2 39. Headaches (without medical cause)
0 1 2 40. Hits others
0 1 2 41. Holds his/her breath
0 1 2 42. Hurts animals or people without meaning to
0 1 2 43. Looks unhappy without good reason
0 1 2 44. Angry moods
0 1 2 45. Nausea, feels sick (without medical cause)
0 1 2 46. Nervous movements or twitching (describe): _____
0 1 2 47. Nervous, highstrung, or tense
0 1 2 48. Nightmares
0 1 2 49. Overeating
0 1 2 50. Overtired
0 1 2 51. Shows panic for no good reason
0 1 2 52. Painful bowel movements (without medical cause)
0 1 2 53. Physically attacks people
0 1 2 54. Picks nose, skin, or other parts of body (describe): _____

Be sure you answered all items. Then see other side.

7-26-00 Edition-601

Please print your answers. Be sure to answer all items.

0 = Not True (as far as you know) 1 = Somewhat or Sometimes True 2 = Very True or Often True

0 1 2 55. Plays with own sex parts too much
0 1 2 56. Poorly coordinated or clumsy
0 1 2 57. Problems with eyes (without medical cause) (describe): _____
_____
0 1 2 58. Punishment doesn't change his/her behavior
0 1 2 59. Quickly shifts from one activity to another
0 1 2 60. Rashes or other skin problems (without medical cause)
0 1 2 61. Refuses to eat
0 1 2 62. Refuses to play active games
0 1 2 63. Repeatedly rocks head or body
0 1 2 64. Resists going to bed at night
0 1 2 65. Resists toilet training (describe): _____
_____
0 1 2 66. Screams a lot
0 1 2 67. Seems unresponsive to affection
0 1 2 68. Self-conscious or easily embarrassed
0 1 2 69. Selfish or won't share
0 1 2 70. Shows little affection toward people
0 1 2 71. Shows little interest in things around him/her
0 1 2 72. Shows too little fear of getting hurt
0 1 2 73. Too shy or timid
0 1 2 74. Sleeps less than most kids during day and/or night (describe): _____
_____
0 1 2 75. Smears or plays with bowel movements
0 1 2 76. Speech problem (describe): _____
_____
0 1 2 77. Stares into space or seems preoccupied
0 1 2 78. Stomachaches or cramps (without medical cause)
0 1 2 79. Rapid shifts between sadness and excitement
0 1 2 80. Strange behavior (describe): _____
_____
0 1 2 81. Stubborn, sullen, or irritable
0 1 2 82. Sudden changes in mood or feelings
0 1 2 83. Sulks a lot
0 1 2 84. Talks or cries out in sleep
0 1 2 85. Temper tantrums or hot temper
0 1 2 86. Too concerned with neatness or cleanliness
0 1 2 87. Too fearful or anxious
0 1 2 88. Uncooperative
0 1 2 89. Underactive, slow moving, or lacks energy
0 1 2 90. Unhappy, sad, or depressed
0 1 2 91. Unusually loud
0 1 2 92. Upset by new people or situations (describe): _____
_____
0 1 2 93. Vomiting, throwing up (without medical cause)
0 1 2 94. Wakes up often at night
0 1 2 95. Wanders away
0 1 2 96. Wants a lot of attention
0 1 2 97. Whining
0 1 2 98. Withdrawn, doesn't get involved with others
0 1 2 99. Worries
0 1 2 100. Please write in any problems the child has that were not listed above.
0 1 2 _____
0 1 2 _____
0 1 2 _____

Please be sure you have answered all items. Underline any you are concerned about.

Does the child have any illness or disability (either physical or mental)? ☐ No ☐ Yes—Please describe:

What concerns you most about the child?

Please describe the best things about the child:

APPENDIX I: IRB APPROVAL LETTER

Appendix I: IRB Approval Letter

University of Central Florida

University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Approval of Human Research

From: **UCF Institutional Review Board #1**
FWA00000351, IRB00001138

To: **Kimberly D Renk** and Co-PI **J'Nelle Alainna Stephenson**

Date: **April 26, 2017**

Dear Researcher:

On 04/26/2017 the IRB approved the following human participant research until 04/25/2018 inclusive:

Type of Review:	UCF Initial Review Submission Form Expedited Review
Project Title:	CHILDHOOD EXPERIENCES AND DOMESTIC VIOLENCE:THE ROLE THAT INTERPARTNER VIOLENCE PLAYS IN RELATIONSHIP FUNCTIONING, PARENTING BEHAVIORS, AND REFLECTIVE FUNCTIONINGIN ADULTHOOD
Investigator:	Kimberly D Renk
IRB Number:	SBE-17-12978
Funding Agency:	
Grant Title:	
Research ID:	N/A

The scientific merit of the research was considered during the IRB review. The Continuing Review Application must be submitted 30days prior to the expiration date for studies that were previously expedited, and 60 days prior to the expiration date for research that was previously reviewed at a convened meeting. Do not make changes to the study (i.e., protocol, methodology, consent form, personnel, site, etc.) before obtaining IRB approval. A Modification Form **cannot** be used to extend the approval period of a study. All forms may be completed and submitted online at https://iris.research.ucf.edu .

If continuing review approval is not granted before the expiration date of 04/25/2018, approval of this research expires on that date. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

Use of the approved, stamped consent document(s) is required. The new form supersedes all previous versions, which are now invalid for further use. Only approved investigators (or other approved key study personnel) may solicit consent for research participation. Participants or their representatives must receive a copy of the consent form(s).

All data, including signed consent forms if applicable, must be retained and secured per protocol for a minimum of five years (six if HIPAA applies) past the completion of this research. Any links to the identification of participants should be maintained and secured per protocol. Additional requirements may be imposed by your funding agency, your department, or other entities. Access to data is limited to authorized individuals listed as key study personnel.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Renea Carver

Signature applied by Renea C Carver on 04/26/2017 02:01:00 PM EDT

IRB Coordinator

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