

Comparing Traumatic Symptoms at Home and in Therapy for Preschoolers Exposed to
Intimate Partner Violence (IPV)

by

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Abstract

The expression of posttraumatic stress symptoms during group therapy, and how this might differ from the expression of those symptoms in the home, was studied in a group of preschoolers following exposure to severe intimate partner violence (IPV). The sample included 55 mother-child intent-to-treat dyads. Reports of posttraumatic symptoms were collected from mothers and child therapists and were compared in terms of the symptom subtypes the child expressed at home and in therapy. Results indicate no significant difference between the total number of posttraumatic stress symptoms that young children expressed at home and in group therapy; there was, however, a significant difference in mothers' and therapists' reports of physiological arousal symptoms. Additionally, higher levels of IPV exposure predicted higher levels of total posttraumatic symptoms. This study has important implications for researchers and clinicians, especially when considering the range of posttraumatic stress symptoms preschoolers can present after exposure to IPV.

Key Words: intimate partner violence, preschool children, traumatic symptoms, group therapy

Comparing Traumatic Symptoms at Home and in Therapy for Preschoolers Exposed to Intimate Partner Violence (IPV)

In recent decades, the negative psychological impact of intimate partner violence (IPV) on children has become widely studied. Witnessing violence may be very distressing, especially for children who are exposed to severe violence. According to recent estimates, approximately 15.5 million American children living in dual-parent homes witness IPV each year (McDonald, Jouriles, Ramisetty-Mikler, Caetano, & Green, 2006). Moreover, children who are exposed to IPV are more likely to endure child maltreatment, neglect, and sexual abuse and are more likely to suffer from health problems such as asthma, allergies, cold and flu, and gastrointestinal problems (Edleson, 1999; Graham-Bermann & Seng, 2005). Children exposed to IPV have more social, behavioral, and cognitive problems than non-witnesses and have a greater risk of developing externalizing and internalizing disorders and traumatic stress symptoms (Fusco & Fantuzzo, 2009; Graham-Bermann, Gruber, Girz, & Howell, 2009). Despite the documented negative effects children suffer after being exposed to severe IPV, current research often underemphasizes the destructive impact IPV has on children's functioning (DeVoe & Smith, 2002).

Preschoolers as a Unique Age Group

The majority of past research concerning children and their exposure to IPV has centered on school-aged children (Graham-Bermann & Levendosky, 1998; Graham-Bermann, Lynch, Banyard, DeVoe, & Halabu, 2007). Studying preschoolers has become a relatively recent trend. Thus far, research has shown that there are many characteristics unique to preschool-age children that must be taken into consideration when interacting with and attempting to treat this age group. In general, preschool-age children may be more vulnerable to the impact of IPV and at greater risk for direct sensory exposure of IPV than older children because they completely

depend on their parents or caregivers for protection from trauma and because they are often at home when the violence occurs (DeVoe & Smith, 2002; Fantuzzo and Fusco, 2007; Levedosky, Huth-Bocks, Shapiro, & Semel, 2003). Preschool children who have been exposed to IPV are at greater risk for developing behavioral problems, negative affect, aggression, insecure attachments to caregivers, and traumatic stress (Graham-Bermann, Howell, Habarth, Krishnan, Loree, & Bermann, 2008; Huth-Bocks, Schettini, & Shebroe, 2001; Levedosky, et al., 2003).

PTSD in Preschoolers Exposed to IPV

Posttraumatic stress disorder (PTSD) may develop in preschoolers following exposure to IPV (DeVoe & Smith, 2002; Graham-Bermann, et al., 2008; Scheeringa, Zeanah, Myers, & Putnam, 2005). Many PTSD symptoms characteristic of adults, such as intrusive thoughts, nightmares, hyperarousal, negative affect, and feelings of hopelessness about the future, are also found in preschoolers (Graham-Bermann et al., 2008; Scheeringa, 2006). However, there are also developmentally unique symptoms that clinicians and researchers must consider when evaluating these children. These symptoms include repetitive play, sleep disturbances, reenacting the trauma during play, developing new fears, increased separation anxiety, and experiencing developmental regressions (Graham-Bermann et al, 2008; Scheeringa, Zeanah, Myers, & Putnam, 2003).

Recognizing and diagnosing PTSD in preschoolers is not always easy. First, due to the chronic nature of IPV, it may be difficult to pinpoint one specific traumatic event that stands out as the worst or most harmful (Margolin & Vickerman, 2007). Preschoolers' stage of development can also pose problems in recognizing PTSD symptoms because their limited cognitive, affective, and verbal abilities can create unique manifestations of posttraumatic symptomatology (Scheeringa, 2006). Additionally, forming a diagnosis relies on caregivers' reports, who, in the case of many children exposed to IPV, are likely suffering from PTSD

themselves (Margolin & Vickerman, 2007; Stover & Berkowitz, 2005). This may be problematic, as parents who experience their own PTSD symptoms have been found to be poor at identifying symptoms associated with posttraumatic stress in their children (Valentino, Berkowitz, & Stover, 2010). Parents of young children often have an especially hard time identifying posttraumatic symptoms because of the child's low verbal skills and ability to convey complex emotion or to identify internal states (Stover & Berkowitz, 2005). It is also possible that parents may not inform clinicians that there is violence occurring in the home, which could lead to a misdiagnosis (Margolin & Vickerman, 2007).

Another challenge to diagnosing PTSD in preschoolers is the current DSM-IV-TR diagnostic criteria. Currently, the DSM-IV-TR requires that children show the same threshold of symptoms as adults; that is, the person must have experienced an extremely traumatic event that threatened, or actually did physically harm that individual or someone else and must also feel intense fear, helplessness, or horror following the event (American Psychiatric Association [DSM-IV-TR], 2000). In addition, a person must endorse one reexperiencing symptom, two physiological arousal symptoms, and three avoidance symptoms (DSM-IV-TR, 2000). Symptoms must last one month in order to qualify for a diagnosis of PTSD. Scheeringa and colleagues (2005) explain how meeting this threshold is extremely challenging for young children, especially because the DSM-IV-TR criteria do not necessarily take into account developmental differences between adults and children. Because of these different measures, many studies have rendered different rates of PTSD in preschoolers. For instance, some researchers have found that up to 56% of their sample met the threshold for PTSD, while others report numbers between 13 and 50% (DeVoe & Smith, 2002; Margolin & Vickerman, 2007).

These inconsistencies have led many researchers to begin using *The Posttraumatic Stress Disorder Semi-Structured Interview and Observational Record for Infants and Young Children*, a more developmentally appropriate instrument for diagnosing PTSD in preschoolers (Scheeringa, Peebles, Cook, & Zeanah, 2001). This new tool lowers the symptom thresholds that young children need to show in order to meet criteria for diagnosis. The new criteria require younger children to only have one avoidance symptom and do not require extreme emotional or behavioral reactions at the time of the traumatic event. The new criteria also involve a completely new symptom involving developmental regressions, which can include the loss of previously acquired skills, such as toileting or speech (Scheeringa et al., 2003).

Not much is known about what types of ecological factors may be predictive of developing PTSD in preschoolers. Graham-Bermann and colleagues found that the amount of violence the child had witnessed was the strongest predictor of PTSD (Graham-Bermann, DeVoe, Mattis, Lynch, & Thomas, 2006). Researchers have also found that in addition to the amount of violence, the frequency of the violence and the duration of the abusive relationship predict PTSD symptoms (Levendosky, Huth-Bocks, Semel, & Shapiro, 2002). Additionally, age, race, gender, and ethnicity all have the potential to impact the development of posttraumatic stress; for instance, younger children often show more symptoms while children from minority backgrounds may show fewer symptoms. Saltzman, Weems, and Carrion (2006) also report that higher verbal IQ predicts fewer posttraumatic symptoms in children. Other researchers have pointed to a caregiver's own distress and level of PTSD symptomatology as predictors of PTSD in young children (Graham-Bermann, et al., 2006; Valentino, Berkowitz, & Stover, 2010).

Interventions for Preschoolers Exposed to IPV

Interventions for preschool-age children who have been exposed to IPV ultimately seek to build the child's social and coping skills and reduce the negative effects of violence exposure by providing a safe space for children to identify and express their feelings and fears about fighting in the family (McDonald, Jouriles, & Minze, 2011; Rossman, Rea, Graham-Bermann, & Butterfield, 2004). These interventions also teach preschoolers that the violence is not their fault, help them learn proper conflict resolution strategies, and address any negative stereotypes they may have about gender roles (Graham-Bermann & Follett, 2000; Neugut & Miller, 2011). Storytelling, using puppets, and structured playtime are all techniques common to interventions with preschoolers exposed to IPV (Huth-Bocks et al., 2001). Many of these clinical interventions also provide support for mothers in order to enhance their own coping and parenting strategies (Graham-Bermann, et al., 2007).

The Present Study

While there is a growing amount of research concerning preschoolers' reactions to IPV, there are currently no studies that focus on how preschool-age children's posttraumatic reactions are expressed during group therapy. This study will add to the current knowledge of what types of traumatic symptoms preschoolers express at home and during group therapy and will attempt to document a relationship, if one exists, between mothers' and therapists' reports of children's PTSD symptoms.

Hypotheses

The current study seeks to provide more knowledge about preschoolers' expression of posttraumatic symptoms during group therapy. Specifically, the study aims to: (1) evaluate the relationship between moms' and therapists' reports of posttraumatic stress symptoms of

preschoolers exposed to IPV; (2) determine if children express similar types of symptom categories at home and in therapy; (3) determine if there is a difference between therapists' and mothers' diagnosis rates of PTSD; and (4) determine how the amount of violence exposure affects the number of reported posttraumatic symptoms.

It is hypothesized that: (1) children who have greater levels of PTSD symptomatology as reported by the mother will exhibit more symptoms overall in therapy than those children with lower reports of symptoms; (2) children will exhibit similar symptom category patterns in therapy as their mothers report they exhibit at home; (3) there will be a significant difference between group therapists' and mothers' diagnosis rates of PTSD, with therapists producing higher diagnosis rates; and (4) higher reports of violence in the home will be related to higher maternal reports of child posttraumatic stress symptoms.

Method

Procedures

Mothers and children were recruited using advertisements posted throughout several communities at public agencies, such as legal and mental health services, retail stores, and local domestic violence emergency shelters as part of a randomized control trial of an intervention program for preschool-age children and their mothers (Graham-Bermann, 2006). Women called a toll-free number to receive more information about the study and were subsequently screened to determine if they qualified for an intervention program for children and mothers who had been exposed to IPV. Mothers were screened to ensure they had a child between 4 and 6 years of age, had experienced IPV in the last two years, and that they and their child were able to participate in a group intervention program. Following the IRB approval and mothers' informed consent, mothers and preschoolers participated in a pre-intervention interview to assess their

posttraumatic stress symptoms. The mothers' interviews lasted 1.5-2 hours and the children's interviews were between 30 and 45 minutes. Interviewers were clinical graduate students or advanced undergraduate research assistants who were trained in structured interview techniques and had received certification in research ethics. Both mothers and children were compensated; the mothers received \$25 and the children received a toy worth approximately \$4.

Following the interview, mothers and preschoolers participated in a 10-session evidence-based group intervention program, the Preschool Kids* Club, aimed at alleviating the negative impacts of violence exposure (Graham-Bermann & Follett, 2000). After each session, two group therapists reported posttraumatic stress symptoms that children exhibited. After the intervention, the children and their mothers participated in a post-intervention interview to assess posttraumatic stress symptoms at follow up.

Participants

The intent-to-treat sample consisted of 55 mothers and their preschool-age children from southeast Michigan or Windsor, Canada who had been exposed to IPV within the past two years. On average, the children were 5 years old ($SD = .93$) and the mothers were 32 ($SD = 7.62$). Mothers in the study had an average monthly income of \$1,415 ($SD = \$1,571$). The sample was racially diverse; 58% of the mothers and 45% of the children were European American, 27% of the mothers and 24% of the children were African American, 6% of the mothers and 24% of the children were biracial, 7% of the mothers and children were Hispanic, and 2% of the mothers were Asian American. The majority of the women, 45.5%, were single, while 29% were separated, 14.5% were still married, 5.5% were living with a partner, and 5.5% were divorced. Fifty percent of the sample were currently living or had previously lived in an emergency shelter and 59% of the mothers were unemployed at the time of the first interview. Approximately 20%

of the women in the sample had at least a high school degree, while 40% had attended some college or vocational school and 25% had finished a bachelor's degree or pursued graduate degrees.

Measures

Demographics. Mothers completed a questionnaire to collect general background information including age, race, income, educational attainment, relationship status, and housing history.

Intimate Partner Violence. To determine levels of family violence, researchers administered the Revised Conflict Tactics Scale (CTS2; Straus, et al., 1996). The CTS2 is a 78-item instrument that measures the severity and frequency of psychological aggression, physical assault and injury, sexual coercion and violence, and negotiation tactics over the past year in a couple's relationship by using a seven-point scale. Only the 39 maternal questions were administered since only mothers participated in the interviews. The CTS2 has proven to be a reliable measure, as its subscales range from $\alpha = .79$ to $\alpha = .95$ (Straus, et al., 1996). For the present study, the reliability for the CTS Total was $\alpha = .81$.

Child Posttraumatic Symptoms were assessed with the Posttraumatic Stress Disorder Semi-Structured Interview and Observational Record for Infants and Young Children (Scheeringa, 2006). The 31-item scale was completed by the mother and identifies the presence or absence of PTSD symptoms in children. If a symptom was present, mothers were asked to give an example of the behavior that exemplified that symptom. The symptoms were clustered into four categories: reexperiencing, avoidance, physiological arousal, and experimental/associated symptoms. After the interviews with mothers, a clinical psychologist and trained researchers evaluated each behavioral account to determine if the example met the

threshold for a trauma symptom. Each symptom was rated as 0-not present, 1-somewhat/a little, or 2-present a lot of the time. Total scale reliability for the present study was $\alpha = .84$.

Group Therapists' Evaluations. To obtain information about children's posttraumatic symptoms during group therapy, therapists evaluated the children using a 22-item instrument based on the Posttraumatic Stress Disorder Semi-Structured Interview and Observational Record for Infants and Young Children (Scheeringa, 2006). Therapists completed an evaluation for every session a child attended based on whether or not they showed symptoms in the following categories: reexperiencing, avoidance, physiological arousal, and experimental/associated symptoms. If the therapist endorsed a specific symptom, he or she wrote an explanation detailing how that symptom manifested itself for that particular child during that session. The wording of some of the symptoms was slightly changed in order to apply to the group setting. For instance, "clinging to group leader," "didn't play as much as other kids," and "had more difficulty concentrating than others" were included in the evaluation.

Results

On average, mothers reported 181.4 ($SD = 119.1$) violent conflict tactics in the past year ranging from psychological aggression to sexual violence to physical injury (see Table 1). Specifically, mothers reported that in the past year they had experienced an average of 56 acts of physical violence ($SD = 59.68$), 96 instances of psychological aggression ($SD = 55.45$), 18 instances of sexual violence ($SD = 30.25$), and had an average of 14 injuries as a result of physical violence ($SD = 18.44$). On average, mothers reported their child expressed 9.48 ($SD = 6.58$) total PTSD symptoms, while group therapists reported an average of 5.61 ($SD = 3.26$) (see Table 1). In terms of specific symptom subtypes, mothers reported at the pre-intervention interview that they had experienced an average of 3.69 ($SD = 3.01$) reexperiencing symptoms,

2.06 ($SD = 2.05$) avoidance symptoms, and 3.73 ($SD = 2.64$) physiological arousal symptoms in the past month. Group therapists, on the other hand, reported an average of 1.99 ($SD = 1.1$) reexperiencing symptoms, 1.67 ($SD = 1.36$) avoidance symptoms, and .76 ($SD = .92$) physiological arousal symptoms for each child across the ten group therapy sessions.

[Insert Table 1 about here]

Frequencies, shown in Table 2, identify the most common symptoms expressed by the sample during group therapy and at home. During therapy, the most commonly endorsed symptoms were “talking about their feelings associated with family violence” (62%), followed by “being more withdrawn or less sociable than other children” (53%), “not playing as much as other children” (42%), and “showing negative feelings associated with family violence” (40%). At home, on the other hand, the most common symptoms children expressed were “irritability, fussiness, mood swings, or temper tantrums” (67%), followed by “appearing upset when separating from the mother” (66%), “acting aggressively” (66%), and “talking about their feelings associated with family violence” (58%). PTSD diagnosis rates of the children were also determined using Scheeringa’s criteria and mothers’ reports; 55% of the children in treatment met a diagnosis for PTSD.

[Insert Table 2 about here]

The first aim of the study was to evaluate the relationship between moms’ and therapists’ reports of trauma symptoms of preschoolers exposed to IPV. It was hypothesized that children who had greater levels of PTSD symptomatology would, by mothers’ reports, exhibit more symptoms in therapy than those children with lower reports of symptoms. This hypothesis was tested using Pearson’s correlations. The relationships between children’s symptoms in therapy and at home were not significant for any symptom subtype (see Table 3). Thus, the hypothesis

that children with more PTSD symptoms by mothers' reports would exhibit more symptoms overall in therapy than those children with lower reports of symptoms by the mother was not supported.

[Insert Table 3 about here]

The second aim of this study was to determine if children exhibited similar symptom category patterns in therapy as they exhibit at home. T-tests were used to evaluate the hypothesis that children would exhibit similar symptom category patterns both in therapy and at home. There were no significant differences between mothers and therapists in the overall reports of reexperiencing symptoms, avoidance symptoms, or total symptoms. There was, however, a significant difference between mothers' and therapists' reports of physiological arousal symptoms ($t(54) = -6.61, p < .01$). On average, group therapists reported 0.76 ($SD = .92$) symptoms while mothers reported 2.22 ($SD = 1.42$). Thus, the hypothesis that children would exhibit similar symptom category patterns in therapy as they do at home was only supported for avoidance and reexperiencing symptom categories; children showed much more physiological reactivity when at home.

The third aim of the study was to determine if there is a difference between therapists' and mothers' PTSD diagnosis rates. After running frequencies, it was determined that mothers' reports rendered more PTSD diagnoses (55%) than did group therapists (22%). Chi-square analyses were performed and showed there was no significant difference between these reporting rates. Thus, the hypothesis that group therapists' reports would be more accurate and render more diagnoses was not confirmed; the difference in reporting rates was not significant between mothers and therapists.

The fourth aim of the study was to determine how the amount of violence exposure related to the number of reported posttraumatic symptoms. In this case, it was hypothesized that higher reports of violence in the home would be related to higher maternal reports of child posttraumatic stress symptoms. Correlational analyses were conducted to determine if specific posttraumatic symptoms categories (reexperiencing, physiological arousal, or avoidance) were related to violence exposure.

Reexperiencing symptoms were significantly related to all types of violence, including total violence exposure ($r(54) = .36, p < .01$), psychological aggression ($r(54) = .41, p < .01$), physical violence ($r(54) = .26, p < .01$), injury ($r(54) = .20, p < .05$), and sexual violence ($r(54) = .22, p < .05$). Reexperiencing symptoms were also significantly related to number of avoidance symptoms ($r(54) = .51, p < .05$) and arousal symptoms ($r(54) = .61, p < .05$). Multiple significant relationships were also found involving arousal symptoms, including total violence ($r(54) = .23, p < .05$), psychological aggression ($r(54) = .28, p < .05$), and physical violence ($r(54) = .19, p < .01$). Avoidance symptoms were significantly related with sexual violence ($r(54) = .22, p < .05$) and physiological arousal symptoms ($r(54) = .53, p < .01$) (see Table 4). Thus, the hypothesis that children who have been exposed to more total violence will express more PTSD symptoms was confirmed for physiological arousal and reexperiencing, but not avoidance, symptom subtypes.

[Insert Table 4 about here]

Discussion

This first aim of this study was to evaluate the relationship between mothers' and therapists' reports of posttraumatic symptoms of preschoolers who had been exposed to IPV. It was hypothesized that children who have greater levels of PTSD symptomatology as reported by the mother would exhibit more symptoms overall in therapy than those children with less PTSD

symptoms. This hypothesis was not confirmed; there was no significant difference between the number of symptoms the child showed in the home compared to the number of symptoms expressed in group therapy.

These results confirm that preschool-age children do suffer from posttraumatic symptoms (Scheeringa et al., 2001) and suggest that their expression of such symptoms is stable across environments. This finding is unique and makes an important addition to the previous literature. Scheeringa and colleagues have found that following exposure to IPV, preschoolers' expressions of traumatic stress symptoms do not necessarily get better with time (Scheeringa et al., 2005), and the current study's findings suggest that their symptoms also do not necessarily differ between environments. This finding is important because it suggests that treatments targeted towards symptoms expressed in therapy can have implications for reducing symptomatology in the home. Additionally, these results show that mothers do have the ability to accurately report their child's PTSD symptoms, something that past researchers have questioned (Valentino, Berkowitz, & Stover, 2010).

The second aim was to determine if children express similar subtypes (reexperiencing, physiological arousal, or avoidance) of posttraumatic symptoms at home as they do in therapy. This hypothesis was supported for reexperiencing and avoidance symptoms categories, and provides external validation of mothers' reports. However, the hypothesis was not supported for physiological arousal symptoms; therapists and mothers differed in their reports of the number of arousal symptoms, with mothers reporting more physiological arousal symptoms than therapists.

First, these results suggest that mothers do have the ability to at least recognize, and even successfully and accurately report, PTSD symptoms in their preschool children. This finding is a significant difference from previous literature; past research has found that caregivers, especially

those who may be suffering from PTSD themselves, can be poor at identifying posttraumatic stress symptoms (Margolin & Vickerman, 2007; Stover & Berkowitz, 2005; Valentino, Berkowitz, & Stover, 2010). The finding of a significant difference in mothers' and therapists' reporting rates of physiological arousal symptoms is understandable; mothers were around their children much more often than were the therapists, so they had more opportunities to observe these manifestations of physiological arousal symptoms. They also know their children better and would be more adept at spotting such behaviors.

The third aim of the study was to determine if there is a difference between therapists' and mothers' rates of PTSD diagnoses. It was predicted that there would be a significant difference in diagnosis rates and that therapists' reports would render more PTSD diagnoses. This hypothesis was not confirmed. Although 55% of the sample met the threshold for a diagnosis based on mothers' reports and only 22% of the children met the threshold based on therapists' reports, chi-square analyses determined that this difference was not significant. This finding is one that further supports the idea that mothers are able to recognize PTSD symptoms in their children following exposure to IPV; mothers were better at recognizing physiological arousal symptoms than were the group leaders, which led to more diagnoses.

The fourth aim of the study was to determine how the amount of violence exposure affected the number of reported posttraumatic symptoms. The hypothesis that children who had been exposed to more total severe violence would express more posttraumatic symptoms overall was supported. In terms of specific symptoms subtypes, total violence scores also affected physiological arousal and reexperiencing, but not avoidance, symptoms. Other significant relationships were found between injury exposure and arousal symptoms, sexual violence exposure and reexperiencing symptoms, and avoidance symptoms and reexperiencing symptoms.

This finding confirms past research that has found that the amount and severity of violence predicts to greater levels of PTSD symptomatology (Graham-Bermann et al., 2006; Graham-Bermann, et al., 2008).

This study also sheds light on the types of posttraumatic symptoms preschoolers are likely to show during therapy and at home following exposure to IPV and how the reporting rates of certain symptoms may be similar or different between mothers and therapists. For instance, both therapists' and mothers' reports of certain symptoms were very similar. These symptoms include "becoming dissociated or spacing out in a daze," "talking about feelings associated with family violence," "showing negative feelings associated with family violence," and "evidence of regression."

However, therapists and mothers had extreme differences in reporting many of the other symptoms. Compared to mothers, therapists reported the symptoms "reexperienced family violence in any way," "didn't play as much as other kids," "displayed less emotion than other kids," and "seeming more withdrawn or less sociable than other kids" much more often. One possible explanation for these differences in reporting rates of these particular symptoms could be the fact that therapists had a level of clinical expertise that the mothers did not. This clinical expertise and the fact that therapists were observing the children in a group setting (thus giving them the ability to make comparisons to the other children) gave them the ability to more easily recognize manifestations characteristic of dissociation, flashbacks, or limited affect in the children.

There were also symptoms that mothers reported much more often than therapists. Examples of these symptoms were "appeared on guard, hypervigilant, or watchful for no reason," "displayed a startled response or got scared for no reason," "afraid of things that others

would not be afraid of,” and “was not able to remember part(s) of the violence.” Many of these symptoms were in the physiological arousal symptom subtype, a category that mothers and therapists showed significant differences in reporting. Additionally, as mentioned before, mothers spent more time with their children and were more familiar with their child’s general behavior and affect than the therapists, making it easier for them to notice these changes in their child. It is also possible that children were just more likely to show physiological arousal symptoms at home where they may have felt unsafe versus in a community shelter with supportive adults and no threat of violence.

These discrepancies in the reporting of individual symptoms ultimately led to differences in the most common symptoms the children expressed at home and in therapy. During therapy, the most commonly endorsed symptoms were “talking about their feelings associated with family violence,” “being more withdrawn or less sociable than other children,” “not playing as much as other children,” and “showing negative feelings associated with family violence.” The most common symptoms expressed at home were different and included “irritability, fussiness, mood swings, or temper tantrums,” “appearing upset when separating from the mother,” “acting aggressively,” and “talking about their feelings associated with family violence.” These most common symptoms found at home, particularly “appearing upset when separating from the mother” and “talking about their feelings associated with family violence” were also found to be the most common symptoms in other studies involving preschoolers who had been exposed to IPV (Levendosky, Huth-Bocks, Semel, & Shapiro, 2002). Knowing what symptoms children are most likely to express at home and in therapy and how these might differ is important for mothers and clinicians who are attempting to treat these children. Finally, with an overall sample PTSD rate of 55%, this study found similar rates in young children as found by others (13-56%)

(DeVoe & Smith, 2002; Levondosky, et al., 2002; Margolin & Vickerman, 2007), further supporting the use of Scheeringa's (2001) revised criteria for PTSD diagnosis in young children.

Limitations

Although this study provides important information about preschoolers' expression of traumatic symptoms during group therapy, there are certain limitations that must be addressed. First, the sample size was relatively small and only involved children from the Midwest who had been exposed to severe IPV and who participated in a group therapy program. Thus, it is possible that a larger, more geographically diverse sample could yield different results.

Another notable limitation to this study concerns the group therapists. The group therapists had different professional backgrounds and levels of clinical experience and training, making it possible that some therapists were more able to recognize and address posttraumatic symptoms better than others. Additionally, there was no measurement of interrater reliability, which would have provided a measure of assurance that the therapists' evaluations were accurate. The make-up of the group may have also created another confound; the group leader's race or gender may have influenced a child's willingness or ability to express trauma symptoms.

A final limitation of this study involves the method by which the child PTSD symptoms were reported. Reports of children's PTSD symptoms relied on mothers' evaluations, which can be problematic; these mothers may be suffering from posttraumatic stress themselves and may not know how posttraumatic stress manifests in preschool-age children. Additionally, mothers might have minimized the impact of IPV on their children or may have felt uncomfortable reporting information related to trauma or violence-exposure (Levondosky et al., 2002; Margolin & Vickerman, 2007).

Clinical Implications

The results of this study are significant and have important implications. First, results show that preschoolers who have been exposed to IPV endorse a wide range of posttraumatic symptoms, including those that are developmentally appropriate, both at home and in group therapy. This is valuable for mothers and clinicians to recognize, particularly in terms of helping these children cope and trying to foster their resilience. The results of the study also highlight the need for improved measures of posttraumatic stress in young children. Additionally, the results have significant implications for clinicians who facilitate group interventions for this age group and population because they highlight which types of symptoms preschoolers are most likely to exhibit during group therapy.

Future Directions

Because children under six have the greatest risk of being exposed to IPV (Fantuzzo & Fusco, 2007), it seems essential that research must continue to focus on this age group and how they respond to the trauma of IPV exposure. Future research might focus on developmental differences of children's expression of traumatic symptoms, even within the preschool age group. Other studies could also look at mothers' ability to report on the posttraumatic symptoms of their child to answer the questions of whether her own distress affects her reporting. Finally, it is clear that more research must also be done on perfecting methods that measure PTSD in young children in order to most accurately provide for their needs.

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Table 1.

Descriptive Statistics

| Measure | Mean | <i>SD</i> | Minimum | Maximum |
|--------------------------|--------|-----------|---------|---------|
| CTS-2 | | | | |
| Psychological Aggression | 95.5 | 55.45 | 0 | 200 |
| Physical Aggression | 56.34 | 59.58 | 0 | 245 |
| Sexual Violence | 18.4 | 30.25 | 0 | 148 |
| Injury | 13.94 | 18.44 | 0 | 98 |
| Total | 181.41 | 119.1 | 0 | 567 |
| Child PTSD | | | | |
| Reexperiencing | 3.69 | 3.0 | 0 | 10 |
| Avoidance | 2.06 | 2.04 | 0 | 9 |
| Arousal | 3.72 | 2.64 | 0 | 10 |
| Total | 9.48 | 6.58 | 0 | 27 |
| Group Therapist | | | | |
| Reexperiencing | 1.99 | 1.1 | 0 | 4 |
| Avoidance | 1.67 | 1.36 | 0 | 4 |
| Arousal | .76 | .92 | 0 | 3 |
| Total | 5.61 | 3.26 | 0 | 13 |

Note: N=55; CTS-2 = Conflict Tactics Scales-Revised; Child PTSD = Mother's reports of child PTSD; Group Therapists = group therapists' reports of traumatic symptoms per session

Table 2.

Types of Trauma Symptoms Expressed During Group Therapy and at Home

| Type of Symptom | Percentage of Children | |
|--|------------------------|--------|
| | Therapist | Mother |
| Reexperiencing | | |
| Dissociated, spaced out in a daze | 29% | 29% |
| Reexperienced family violence in any way | 22% | 4% |
| Reenacted family violence in play or drawing | 26% | 35% |
| Showed any negative feelings associated with family violence | 40% | 46% |
| Talked about feelings associated with family violence | 62% | 58% |
| Arousal | | |
| Appeared on guard, hypervigilant, or watchful for no reason | 6% | 35% |
| Displayed a startled response or got scared for no reason | 6% | 51% |
| Displayed irritability, fussiness, mood swings, or temper tantrums | 33% | 67% |
| Got biologically worked up when reminded of the event | 9% | 20% |
| Had more difficulty concentrating than other kids | 33% | 20% |
| Avoidance | | |
| Didn't play as much as other kids | 42% | 4% |
| Displayed less emotion than other kids | 27% | 9% |
| Tried to avoid activities related to violence | 20% | 29% |
| Tried to avoid hearing or talking about the violence | 22% | 36% |
| Seemed more withdrawn or less sociable than other kids | 53% | 20% |
| Was not able to remember part(s) of the violence | 4% | 15% |

Experimental

| | | |
|--|-----|-----|
| Acted aggressively | 26% | 60% |
| Afraid of things that others would not be afraid of | 11% | 55% |
| Any other evidence child was upset during the session | 16% | -- |
| Appeared upset when separating from mother | 26% | 66% |
| Clinging to group therapist | 26% | -- |
| Evidence of regression (thumb-sucking, wetting, transitional object) | 15% | 22% |

Note: N=55

Table 3.

*Pearson Correlation Coefficients for Therapist-rated and Mother-rated Child PTSD Symptoms**Categories*

| Variable | 1 | 2 | 3 | 4 | 5 | 6 |
|-----------------------------------|------------------|-------|------|-------|-------|-----|
| 1. Group Therapist Avoidance | 1.0 | - | - | - | - | - |
| 2. Group Therapist Reexperiencing | .30* | 1.0 | - | - | - | - |
| 3. Group Therapist Arousal | .13 | .42** | 1.0 | - | - | - |
| 4. Mother Avoidance | .09 | .10 | .08 | 1.0 | - | - |
| 5. Mother Reexperiencing | .23 [†] | -.11 | -.08 | .59** | 1.0 | - |
| 6. Mother Arousal | .16 | .06 | -.01 | .64** | .61** | 1.0 |

Note: [†] $p < .10$, * $p < .05$, ** $p < .01$

Table 4.

*Pearson Correlation Coefficients for CTS-2 Scales and Mother-rated Child PTSD Symptoms**Categories*

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----------------------------|-------|------|-------|-------|-------|------|-------|------|-----|
| 1. Total Violence | 1.0 | - | - | - | - | - | - | - | - |
| 2. Negotiation | .27** | 1.0 | - | - | - | - | - | - | - |
| 3. Psychological Aggression | .85** | .07 | 1.0 | - | - | - | - | - | - |
| 4. Physical Violence | .85** | .04 | .68** | 1.0 | - | - | - | - | - |
| 5. Sexual Violence | .62** | -.01 | .46** | .42** | 1.0 | - | - | - | - |
| 6. Injury | .77** | .05 | .57** | .79** | .32** | 1.0 | - | - | - |
| 7. Arousal Symptoms | .23* | .04 | .28* | .19** | .16 | .12 | 1.0 | - | - |
| 8. Avoidance Symptoms | .16 | -.16 | .19 | .16 | .22* | .10 | .53** | 1.0 | - |
| 9. Reexperiencing Symptoms | .36** | .06 | .41** | .26** | .22* | .20* | .61* | .51* | 1.0 |

Note: † $p < .10$, * $p < .05$, ** $p < .01$