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Expression of re-experiencing symptoms in the therapeutic context: a mixed-method analysis of young children exposed to intimate partner violence

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ABSTRACT

Assessment, diagnosis and treatment of preschoolers with post-traumatic stress disorder (PTSD) is an understudied domain, and translational research assisting practitioners in the real-life identification of PTSD symptoms is critical. The current study examined therapists' behavioural notes of 56 children participating in a 10-session intervention following exposure to intimate partner violence. The notes were analysed to identify themes in children's expression of re-experiencing symptoms and examine the overlap of these symptoms with emotional and behavioural dysregulation. The majority of re-experiencing in the therapeutic context was verbally expressed (e.g. storytelling), but physical re-enactments had the most overlap with in-session emotional and behavioural dysregulation. Session content that addressed who is to blame for the violence, characteristics about families, and conflict resolution techniques elicited particularly high levels of re-experiencing symptoms. The findings indicate that re-experiencing symptoms are both evident and recognisable in the therapeutic context, and practitioners should be careful not to misdiagnose children with behaviour disorders when dysregulation is explained by the presence of re-experiencing symptoms. Potential safety mechanisms that can be put in place to support young children during "high triggering" sessions are also considered.

KEYWORDS

Domestic violence; re-experiencing; preschoolers; treatment

Introduction

Violence between parents is the single greatest cause of substantiated child emotional abuse worldwide (Trocme & Wolfe, 2001). It is estimated that up to 15.5 million American children are exposed to intimate partner violence (IPV) in any given year, making exposure to family violence a pressing issue in child protection (McDonald, Jouriles, Ramisetty-Mikler, Caetano, & Green, 2006). This exposure is linked to a wide range of emotional, behavioural, social, and cognitive problems in children, including physical health problems, school suspension and absences, anxiety and internalising problems, behaviour problems, and decreased verbal ability (e.g., Graham-Bermann, Howell,

Miller, Kwek & Lilly, 2010; Graham-Bermann & Seng, 2005; Kennedy, Bybee, Sullivan, & Greeson, 2009; Kernic, Holt, Wolf, McKnight, Huebner, & Rivara, 2002; Suglia, Enlow, Kullowatz, & Wright, 2009).

Children exposed to IPV may also develop symptoms of post-traumatic stress, which can emerge in infancy (Bogat, DeJonghe, Levendosky, Davidson, & von Eye, 2006). Estimates of the number of children suffering from post-traumatic stress disorder (PTSD) following exposure to IPV range from 17 to 51% depending on the age group, ethnic background, and other types of violence exposure assessed (Graham-Bermann, Castor, Miller, & Howell, 2012; Moretti, Obsuth, Odgers, & Reebye, 2006). The wide range in estimated rates of PTSD may also be due to low diagnostic reliability for PTSD in young children (Scheeringa, Myers, Putnam, & Zeanah, 2012). In order to help improve the diagnostic validity of PTSD in young children, a preschool-specific subtype of PTSD has been included in the most recent version of the *Diagnostic and Statistical Manual for Mental Disorders 5* (American Psychiatric Association [APA], 2013). Changes of note include the recognition that children may not be distressed by intrusive recollections, are required to exhibit fewer avoidance symptoms to qualify for diagnosis, and may show increased irritability and anger outbursts (APA, 2013).

Although children, like adults, show symptoms in all four diagnostic domains—re-experiencing, hyper-arousal, negative cognitions/mood and avoidance—understanding re-experiencing symptoms may be especially important because they are the most commonly reported symptoms of PTSD in young children (Levendosky, Huth-Bocks, Semel, & Shapiro, 2002; Scheeringa, Zeanah, Myers, & Putnam, 2003). In a study of children exposed to IPV, Levendosky et al. (2002) found that over 90% of children experienced at least one symptom of re-experiencing more than one month after violence exposure. The presence of re-experiencing symptoms in children is a diagnostic feature unique to PTSD, so much so that the American Academy of Child and Adolescent Psychiatry (1998) once argued that its presence was sufficient for diagnosis.

Re-experiencing symptoms have also been uniquely linked to other types of adjustment problems in young children. For example, re-experiencing symptoms were a predictor of aggressive behaviour in one study (Levendosky et al., 2002). Re-experiencing has also been linked to post-traumatic play, reduced self-awareness, and developmental delay in play skills in observational research studies (Cohen, Chazan, Lerner, & Maimon, 2010). In older children, re-experiencing symptoms were found to mediate the relationship between abuse history and self-injurious behaviours (Weierich & Nock, 2008). As such, re-experiencing symptoms have significant implications for concurrent adjustment problems in young children, but left untreated they appear to have long-term mental health implications as well.

A number of treatment methods have been employed to ameliorate children's post-traumatic stress symptoms. Trauma-focused cognitive behavioural therapy is designed to provide parent and child psycho-education about trauma, build coping skills, and process a narrative of the child's traumatic experiences. Results from a recent study of young children (age four to 11) with histories of sexual abuse indicated that both eight-week and 16-week versions of the programme were efficacious in reducing re-experiencing. Another programme, child-parent psychotherapy, focuses on enhancing the quality of the parent-child relationship as one way of reducing child adjustment problems following exposure to traumatic events (Lieberman, Ippen, & Van Horn, 2006). For those participating in child-parent psychotherapy, fewer overall PTSD symptoms have been

reported at follow-up (Ippen, Harris, Van Horn, & Lieberman, 2011) but specific effects of treatment on re-experiencing symptoms were not reported.

Play-based therapies for child PTSD are commonly used, but have undergone fewer empirical evaluations. These studies are still quite valuable in that they have provided some of the only qualitative data on children's expression of trauma symptoms during therapy, rather than solely evaluating pre-treatment and post-treatment symptomology. One developed tool, the Traumatic Play Scale, assesses children's symptom expression in therapy in five domains: repetitive play, intense play, play disruption, avoidant play, and expression of negative affect (Myers, Bratton, Hagen, & Findling, 2011). However, Myer et al.'s (2011) study based the scale on a pre-conceived coding system, which introduces an *a priori* structure and does not provide the full detail of a qualitative emergent coding paradigm. It also does not consider how symptoms are related to other emotional and behavioural problems in the therapeutic context.

In sum, children's re-experiencing symptoms are an especially significant component of post-traumatic stress symptomology in that they appear to drive short-term and long-term adjustment difficulties in other domains (e.g., Cohen et al., 2010; Weierich & Nock, 2008). Little research has examined the expression of post-traumatic stress symptoms in the therapeutic context, leaving practitioners with little data regarding how they might expect children to present *in vivo*. It is possible that this lack of information regarding symptom presentation has, in part, caused some difficulties in the diagnostic reliability of PTSD in young children. Shedding light on children's expression of re-experiencing symptoms in therapy may also illuminate how to improve therapeutic interventions. Yet to date no research has examined children's expression of PTSD symptoms within the therapeutic context using methods linked to diagnostic guidelines for PTSD in children and allowing for the emergence of thematic content above and beyond a strict diagnostic checklist.

Objective of the current study

The current study seeks to address limitations of existing research by providing a thematic analysis of children's re-experiencing symptoms during the course of an evidence-based intervention for children exposed to IPV. Here, only children participating in the treatment group ($n = 56$) were examined owing to the focus on symptom presentation in the therapeutic context. Therapists provided information regarding children's expressions of post-traumatic stress during therapy both by completing a symptom checklist and by recording descriptive information of how the symptom was expressed. The current study is a thematic analysis of therapists' qualitative symptom descriptions.

Methods

Research questions included: (1) in what ways do preschoolers express re-experiencing symptoms in a therapeutic context; (2) how are symptoms of re-experiencing related to emotional and behavioural dysregulation; and (3) are there particular times in the context of a short-term therapy when preschoolers exhibit more frequent symptoms? The aim of the study was to better understand symptom expression within the therapeutic

context and to provide insight and recommendations for effective recognition and management of symptoms by clinicians.

Participants

Fifty-six children between the ages of four and six (mean = 5.00, standard deviation [SD] = 0.91) and their mothers participated in the current study. Forty-eight per cent of the children were boys. Mothers ranged in age from 21 to 54 (mean = 32.03, SD = 7.43). Of those who reported information about the violent partner, 73.9% identified him as the child's father. Other violent partners included stepfathers and mothers' boyfriends. The sample was low income, with an average of US\$1,474/month (SD = US\$1,570). Seventy per cent of mothers had completed at least some college, additional training, or more. The children were from a wide range of racial and ethnic backgrounds: 30% were Caucasian, 39% were African-American, 27% were biracial, and 4% identified as Hispanic/Latino/a.

Procedure

After obtaining institutional review board approval, the opportunity to participate in the study was advertised using flyers and brochures distributed to participating local agencies. Recruiting materials were distributed in southeast Michigan (United States) and southern Ontario (Canada). Data were collected from 2006 to 2008. Informational flyers included a toll-free number that mothers could call. When mothers called, the project coordinator completed a brief telephone screen to ensure that they met the eligibility criteria for the study, which required mothers to have a child between the ages of four and six who had been exposed to IPV in the past two years. The project coordinator gave a brief description of the project and, if the mother was still interested, proceeded to schedule an initial interview. Interviews were scheduled at a safe location to avoid any risk to the family or the interviewers. If no abuser was living in the home, mothers could opt to have the interviews there; otherwise the interviews were scheduled at a neutral and protected location, such as a local community centre.

As part of an ongoing longitudinal study, families were allocated to a comparison or treatment condition using a block random assignment process. Families in the comparison group were invited to participate in treatment following the completion of their interviews for the study. Families receiving treatment participated in the Preschool Kids' Club and Moms' Empowerment programmes (Graham-Bermann, 2000, 2012; Graham-Bermann & Miller, 2013; Graham-Bermann & Miller-Graff, 2015; Howell, Miller, Lilly & Graham-Bermann, 2013). The intervention is a 10-session programme designed to address common problems in families following exposure to IPV and to enhance their adjustment. The Preschool Kids' Club programme takes a skills-based approach, with a new topic introduced each session. Session material is presented using displacement (i. e. information non-specific to any child's particular trauma history) through play (e.g. acting out emotions with animal puppets). A detailed explanation of the programme content can be found elsewhere (e.g., Graham-Bermann, 2000; 2012), but sessions generally target emotion identification and coping, relaxation, safety planning, reducing self-blame surrounding family violence, correcting maladaptive attitudes and beliefs about violence, and identifying family strengths.

Two therapists were present at each session. Therapists included licensed clinical psychologists, social workers, and graduate students in psychology and social work. All therapists completed formal training in work with high-risk clinical populations. In addition, therapists completed a 15-hour training programme on intervention administration prior to beginning the programme. This training included information on PTSD symptom presentation in childhood and training on the clinical assessment of these symptoms. All therapists received two hours of group supervision by a licensed clinical psychologist prior to each session. Following each session, therapists completed an inventory of post-traumatic stress symptoms displayed by the child and wrote qualitative descriptions of the symptoms they observed.

Measures

Demographics

During the intake interview, mothers completed a brief worksheet reporting on basic demographic characteristics for themselves and their child, including race/ethnic background, income, educational attainment, and employment status.

Intimate partner violence

Mothers reported on their violence victimisation by an intimate partner using the Conflict Tactics Scale—Revised (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). This scale is a standardised, reliable measure that assesses violence in a number of domains, including Psychological Aggression, Physical Assault, Sexual Coercion, Injury, and Negotiation. Mothers reported on the violence that they had experienced in the past year. Reliabilities for the current study were: Psychological Aggression ($\alpha = 0.86$), Physical Assault ($\alpha = 0.91$), Sexual Coercion ($\alpha = 0.86$), and Injury ($\alpha = 0.72$).

Post-traumatic stress symptoms in therapy

Following each session, therapists evaluated each of 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 & Zeanah, 1994). This measure included five possible re-experiencing symptoms, six possible avoidance symptoms, five possible physiological arousal symptoms, and six possible experimental/associated symptoms. Both therapists completed the inventory together because the high level of activity in sessions did not allow both therapists to have the opportunity to independently complete a comprehensive assessment of each child. Rather, therapists conferred following the session to include behaviours that they had observed jointly as well as independently. If therapists felt that a child exhibited a symptom, they wrote a qualitative description of the symptom expression. The notes coded in the current study included data from comparison children who participated in treatment after their final comparison interview and did not include experimental children who were asymptomatic or who had no additional behavioural notes from therapists. All behavioural notes were reviewed in the following supervision session to ensure that they did, in fact, indicate the presence of a PTSD symptom. The behavioural descriptions were then entered into NVivo 10 for analysis.

Analytic protocol

Behavioural data were analysed using a thematic analysis, which combines the guiding role of the previous knowledge and theory about constructs of interest with the flexibility to allow for the “emergence” of new themes (Braun & Clarke, 2006). The specific analytic method for the current study followed the six steps for thematic analysis recommended by Braun and Clarke (2006), which are: (1) familiarising yourself with your data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report.

In accordance with this process, the project team (a clinical psychologist, two graduate students, and an advanced undergraduate) spent several months familiarising themselves with relevant literature to help prepare for analysis of the session notes. Following this, the team individually read over therapist session notes and generated a set of initial codes (step 2). The team then met to discuss the creation of a cohesive coding system, which was then constructed using NVivo 10 software. Research team members coded a subset of the session notes individually, with an inter-rater reliability of $\kappa = 0.66$. Once all notes were coded, coding discrepancies were discussed in a team meeting. Following this team meeting, the remaining session notes were coded, with an inter-rater reliability of $\kappa = 0.84$. Again, discrepancies were discussed and resolved prior to analysis.

Following the completion of coding, frequencies at each coding node in NVivo were examined and collated into themes, which were conceptualised in a thematic map (see [Figure 1](#)). These themes were then reviewed and the team met to discuss how they should best be integrated into a meaningful discussion of child re-experiencing symptoms in therapy. The results of the analysis are presented in the following. Following the identification and analysis of thematic codes, the researchers compiled a quantitative analysis of the numbers and types of symptoms occurring in each session in order to identify treatment content that may have elicited higher levels of re-experiencing symptoms. In addition, a graphical depiction of symptom variation was created in order to identify patterns in symptom expression that may be useful for greater clinician understanding of treatment expectations.

Results

At the intake interview, mothers reported on the frequency of IPV victimisations in the past year. They reported high levels of violence, including Psychological Aggression (mean = 104, SD = 56), Physical Assault (mean = 62, SD = 63), Sexual Coercion (mean = 26, SD = 37), and Injury (mean = 18, SD = 22).

After coding therapist reports of child behaviour during therapy, the thematic map was created based on primary emergent themes (see [Figure 1](#)). The report of results on the qualitative analysis begins with a discussion of the primary themes in the thematic map in order to provide an in-depth understanding of each emergent category. Following this, an analysis of how these categories overlap with therapist-noted emotional and behavioural regulation difficulties in these children is given. Finally, a quantified examination of these symptoms is presented in order to give preliminary insight into symptom tracking over the course of therapy. Here, we will consider symptoms responses both over time and in response to specific session content.

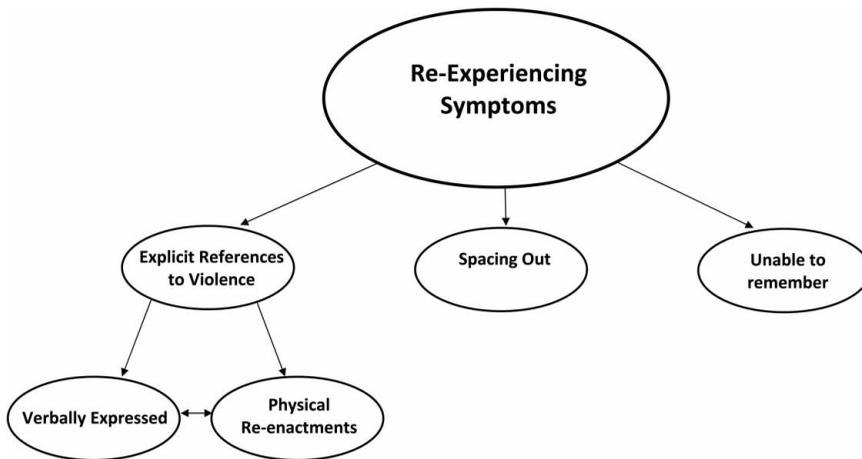


Figure 1. Thematic map for understanding children's re-experiencing symptoms in therapy.

Re-experiencing symptoms

Explicit references to violence

One of the more pervasive ideas in trauma work with young children is that children exhibit re-experiencing symptoms through physical re-enactments during play (APA, 2013; Shaw, 2000). These were indeed noted in the current data and specific examples are given in the following. A second, more frequent type of explicit reference to violence took the form of verbal expression (e.g. through storytelling).

Physical re-enactments. Based on previous research and code development, our research team considered physical re-enactments of trauma to include behaviours such as direct physical re-enactments of altercations between parents and drawing or play behaviours reflecting violence (without verbal description of content). Chi-squared analyses and independent *t* tests indicated that physical re-enactment of re-experiencing symptoms was unrelated to child sex, age, or level of IPV exposure. In all, there were 19 coded instances of physical re-enactments (across 18 children, 10 were male). Common types of physical re-enactments included the use of toys/puppet to carry out aggressive acts. For example, one therapist reported: "The child re-enacted violence briefly with a puppet, saying things like 'I hate you' and 'you're mean', pushing the other puppet." Re-enactments also occurred without toy "props", although this was less common. For example, one child "threw imaginary punches". Another common type of physical re-enactment was drawing a picture that had violent content. For example, one child drew a picture of "blood and bones" and another drew a picture of "people punching, kicking and cussing". Many of these drawings were also accompanied by verbal descriptions.

Verbally expressed re-experiencing. Compared with physical re-enactments, verbally expressed re-experiencing was much more common, with 35 coded references across 26 children (12 were boys). Chi-squared tests indicated no differences in verbally mediated re-experiencing symptoms by child gender, and independent *t* tests showed no significant differences in violence exposure. However, there was a trend for younger children to exhibit more verbally expressed re-experiencing ($t(54) = 1.79, p = 0.08$). Of symptoms

in this domain, it was most common for children to make unexpected/out of context disclosures about violence they had witnessed. For example, during an activity in which children are asked to make three wishes for their future, one child reportedly described “his dad hit[ting] his mom ... he also mentioned an incident where his father hit someone in the face and he had to call the police”. Also during this activity, another child “started to talk about how his father would burn up and throw away his mother’s clothes”. Children sometimes disclosed other traumatic events, such as abuse they had experienced. In addition, a few children told their therapists about nightmares. As one therapist noted, “she [the child] frequently talks about her nightmares. She says they are very scary, and someone or something often gets killed in them. There is lots of blood. She believes that they are real”.

Overlaps with emotional and behavioural dysregulation. What was most notable about direct references to violence was that physical re-enactments frequently overlapped with other symptom categories, while verbal re-enactments did not. Physical re-enactments overlapped with the categories of verbally expressed re-experiencing ($n = 3$), physical aggression ($n = 8$), verbal aggression ($n = 4$), negative reactions to loud noises ($n = 1$), spacing out ($n = 1$), and behavioural outbursts ($n = 1$). One example of such overlap is from a child who reported “at school today ... he called a girl a ‘slut’ and she kicked him and he kicked her back. He stated that he learned that word from his dad and said that his dad is in jail” (physical re-enactment with physical and verbal aggression). In contrast, verbally expressed re-experiencing symptoms rarely overlapped with emotional and behavioural dysregulation. In fact, only one clear example of overlap was present. In this instance, the child “threw play-dough on the floor violently after she disclosed that she was scared when her dad hit her mom and there was blood”.

Spacing out

Spacing out was also a relatively common occurrence amongst these children, with a total of 29 references across 15 children (five were boys). Chi-squared and independent t tests indicated that spacing out was not significantly associated with child gender, age, or level of violence exposure. It is important to note that for this symptom category, coders were careful to differentiate spacing out as a re-experiencing symptom from attention problems/distractibility. Specifically, children who showed spacing out behaviour did so in reaction to a reminder of violence. For example, one therapist reported that “while talking about feelings about fighting in the home, the child dazed out and had to be asked the question two times”. Another therapist reported that one child “spaced out very noticeably for several minutes during the ‘it’s never the kids’ fault when the parents fight’ activity”. These symptoms rarely overlapped with other types of re-experiencing symptoms.

Unable to remember

Only two children were observed to have difficulty remembering a part of the trauma that they had witnessed, probably due to the fact that therapists did not specifically ask children to tell about their experiences of family violence during the intervention. These two children, however, were noted to have difficulty telling complete stories when they voluntarily disclosed information about family violence, and one frequently said “I don’t know” after being asked to clarify a point.

Re-experiencing symptoms across sessions

Of those children participating in treatment, 38 exhibited at least one behaviour consistent with one of the re-experiencing categories evaluated here. Fourteen children experienced symptoms from two symptom categories, three children from three categories, and one child from all four categories. There were no differences between those children exhibiting re-experiencing symptoms from those who did not experience these symptoms in terms of gender, age, or violence exposure.

Following the qualitative coding of children's re-experiencing symptoms these symptoms were mapped quantitatively by session (see Figure 2). Two spikes in re-experiencing symptoms were noted at sessions three, seven and eight. This prompted us to examine the specific content of these sessions to determine possible triggers for children's re-experiencing symptoms. In session three, therapists focus on children's role in the violence, reinforcing the idea that children are not responsible or to blame for the violence that has occurred in their homes. There is then a notable dip in symptoms by session five, which introduces safety practices and plans surrounding violence in the home. Sessions seven and eight, where re-experiencing symptoms again heightened, focus on "what is good about families" and conflict resolution strategies.

Discussion

The aim of the current study was to construct an in-depth analysis of preschoolers re-experiencing symptoms in the context of a group therapy intervention. Overall, it appears that therapists describe some type of re-experiencing symptom for approximately two-thirds of the children over the course of therapy. These symptoms are primarily verbally expressed (e.g. storytelling, disclosures about violence, descriptions of drawings), but

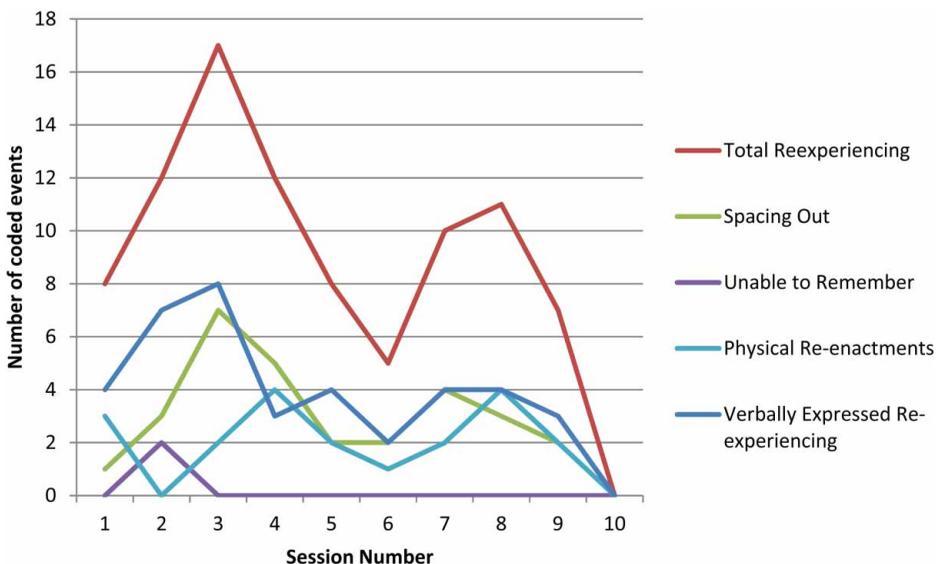


Figure 2. Children's re-experiencing symptoms over the course of treatment.

physical re-enactments of violence were most likely to overlap with other types of emotional and behavioural dysregulation.

That the overlap of children's verbally expressed re-experiencing symptoms and emotional dysregulation is relatively limited in this study is notable and provides support for recent changes made to the *Diagnostic and Statistical Manual for Mental Disorders 5* for PTSD in children younger than six. These criteria eliminated the requirement of "intense psychological distress" following reminders of violence and note that children may show neutral or euthymic affect during intrusive recollections (APA, 2013). Aggressive or dysregulated behaviours had more significant overlap with physical re-enactments than with other categories of re-experiencing symptoms. It is possible for young children that physical re-enactments of violence represent a more severe level of re-experiencing. As such, it may be important for clinicians to be particularly present to this aspect of traumatic re-experiencing.

It is also important for clinicians to carefully distinguish physical re-enactments paired with dysregulated behaviours from internalising and externalising behaviour problems, as these are also common problems in children exposed to violence (e.g., Kennedy et al., 2009; Kernic et al., 2003). It may be especially helpful for clinicians to examine the context and triggers for violent recollections and behaviours as one way of gaining information about differential diagnosis. In this sample, instances of physical re-enacting occurred either in response to discussions about family violence or seemed to come "out of the blue". They were rarely, if ever, related to rules enforced by the group therapists, structures, or interactions with peers as might be typical for oppositional behaviour disorders.

Another important finding of the current study is the frequency with which children verbally expressed their experiences of violence. First, this finding indicates that even pre-school-aged children have cognitive and verbal abilities that are developed enough to report effectively on their experience of violence. It should be noted that their recollections of violence are not necessarily accurate ones, but they still are impactful and felt as true (e.g. children believing that their nightmares have happened).

A frequent question posed to our research team by community members and clinicians is how one determines traumatic re-experiencing (e.g. through drawing) from non-traumatic storytelling. Based on the current data, we would recommend therapists consider a few possible hallmarks: verbal or physical references to conflict include extremely violent content (e.g. "blood and bones"); these references do not occur only in response to direct questioning about violence, but also occur in response to general discussions about families (as in session eight) or come "out of the blue"; and children report symptoms in multiple contexts (at school, nightmares at home). As with all diagnostic evaluations, therapists are likely to benefit from the inclusion of multiple reporters and observational data. However, it should also be noted that therapists may be unlikely to observe re-experiencing symptoms within initial evaluation sessions, as this was the case in the current study. Rather, it seems that re-experiencing symptoms probably do not appear in early treatment, but may surface after initial introductions/adjustment to the treatment setting.

Clinical implications

In addition to assisting in the accurate identification and assessment of re-experiencing symptoms, the current study has a number of implications for treatment with pre-school-aged children exposed to violence. First, it appears that preschoolers may need

additional support after the introduction of specific types of treatment content. In this study, children's re-experiencing symptoms were heightened when discussing that children are never responsible for interparental violence, as well as what is good about families and conflict resolution. Although symptoms declined after each of these sessions, it may be important for clinicians to activate parental supports for children after introducing session content that may cause a temporary rise in symptoms. For example, therapists may wish to conclude sessions by giving mothers "homework" related to practicing coping and safety with their children, which were related to lower levels of re-experiencing in this study. In the current treatment, it also appeared that identifying coping strategies and creating safety plans were especially helpful in assuaging children's re-experiencing symptoms (see Figure 2).

Second, the children in the treatment group showed an initially low level of re-experiencing symptoms, followed by a spike at session three and then fluctuating levels of symptoms to the end of treatment. This has significant implications for treatment adherence, because it may be harmful for children to participate in enough sessions to become activated but not enough to learn coping strategies for their symptoms. It may be helpful for therapists to have a frank discussion with parents regarding these issues, and carefully evaluate the family's ability to regularly bring their child(ren) to treatment. If the family cannot commit to regular participation for a duration of at least six to 10 sessions, it may be advisable to conduct parent-only treatment or to have child treatment only include basic "skill set" modules (Deblinger, Mannarino, Cohen, Runyon, & Steer, 2011).

Limitations

As with any research, the current study has a number of limitations. First and foremost was the reliance on written behavioural observations rather than coded video of children's behaviours and symptoms. Because of this reliance on written notes, the context of children's symptoms was at times unclear. Coding erred on the side of caution because of this, and it may be that the current study is an underestimate of children's re-experiencing symptoms in therapy. Perhaps with other kinds of therapeutic interventions the frequency and type of re-experiencing symptoms expressed by young children during therapy might be different.

In addition, there were some unique characteristics of the current sample that may limit the generalisability of the results. First, all of the children in this sample were exposed to relatively severe IPV, which may have accounted for the inability for frequency of IPV tactics to distinguish between children with varying levels of re-experiencing symptoms. It would be helpful for future studies to include a group of mild-exposure participants to more effectively compare such effects. Children in this study were also drawn from one geographic region, and although they were of diverse socio-economic, racial/ethnic, and educational background, they do not represent a national sample.

Conclusion and future directions

Results from the current study indicate that, for preschoolers exposed to IPV, symptoms of re-experiencing are common and are most likely to be verbally expressed (e.g. storytelling, disclosures about violence, descriptions of drawings). Physical re-enactments of

violence, while less common, were most likely to overlap with other types of emotional and behavioural dysregulation. Importantly this emotional and behavioural dysregulation was linked to discussions about family violence and/or self-disclosed information about exposure to violence, giving these behaviours a distinctly different character from those common to oppositional/externalising disorders. Because re-experiencing symptoms seemed to emerge after the initial sessions, it is evident that continuing assessment in the therapeutic context is essential when working with children exposed to violence.

Importantly, this study suggests that intervention research would benefit from more frequent evaluations of children's PTSD symptoms over the course of their time in treatment. This will serve to inform clinicians about possible curvilinear treatment effects, identifying times of particularly heightened risk for young children. This is an important advance in considering the safety of implementing trauma treatment with these young and vulnerable children. Future studies should also consider the creation of a coding system for video data in treatment. This would probably provide an even greater depth of information and contextualise children's re-experiencing symptoms. Such information could highlight important additional "flags" for clinician assessment of children's post-traumatic stress, as well as more reliably identify common triggers or antecedents to re-experiencing symptoms.

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