

PTSD Symptoms as Moderators of the Relationship between Family Violence and Aggression:

Which Symptoms Matter Most?*

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Introduction

Children and adolescents who witness family violence are at increased risk for perpetrating aggressive acts, such as bullying (e.g., Baldry, 2003) or delinquent behaviour (e.g., Kernic et al., 2003). Investigations of the long-term effects of exposure to family violence revealed that children who have observed their parents aggress against each other were at greater risk for being victims or perpetrators of violence during adolescence (e.g., Wolfe et al., 1998).

The social, emotional and behavioral difficulties of children and adolescents who have witnessed family violence have been described as comparable to the effects of direct maltreatment, such as physical and sexual abuse (e.g., Kitzmann et al., 2003). Clinicians and researchers have recognized that witnessing family violence, as a form of psychological maltreatment, is associated with higher risk for post-traumatic stress disorder (PTSD). For example, Muller et al. (2000) reported a significant correlation of $r=.45$, $p<.05$ between exposure to family violence and PTSD diagnosis in a high-risk adolescent sample with low social support.

Given the impact of family violence and other types of maltreatment on child functioning one would expect to find high rates of PTSD in samples of children exposed to severe maltreatment. Yet, researchers have found that a relatively small proportion of youth exposed to trauma meet full PTSD criteria. For example, one of our earlier studies on PTSD in adolescents with conduct disorder (Reebye, Moretti, Wiebe & Lessard, 2000) revealed that only 17% of youth who were exposed to trauma and displayed posttraumatic symptomatology met full PTSD criteria. Similarly, Stewart et al. (2004) found that only 18% of homeless adolescents exposed to street victimization met full PTSD criteria although almost all of them exhibited posttraumatic symptoms.

The low prevalence of PTSD in these studies has led some to suggest that diagnostic procedures for identification of symptoms be altered to allow for more accurate assessment of trauma and symptoms in children and adolescents exposed to maltreatment. Such adjustments have led to higher estimates of prevalence. For example, Steiner and Cauffman (1998) reported that 48.9 % of female juvenile delinquents in their study met full criteria for PTSD and an additional 11.7% met partial criteria for PTSD. Researchers have also begun to question the categorical assumption underlying the diagnosis of PTSD and recommend that research focus on PTSD symptoms rather than diagnosis, particularly in studies of children and adolescents.

Although PTSD has been implicated in moderating the impact of maltreatment on problem behavior, such as aggression, research

has yet to examine whether some PTSD symptoms are more important than others in this regard. In this study, we examined the moderating role of PTSD symptom clusters (*intrusive, avoidance and hyperarousal*) on the relationship between exposure to family violence and aggression.

Method

Participants

Participants included 49 girls and 83 boys, 13 to 18 years of age, selected from a provincial centre for severe conduct disorder in the Vancouver area. Data collection is continuing and results will be updated with a larger sample.

Measures

Clinician Administered PTSD Scale for Children and Adolescents (CAPS-CA; Nader et. al. 1996). The CAPS-CA is a semi-structured clinical interview that assesses each of the diagnostic criteria for PTSD as described by the DSM-IV (APA, 1994).

Record of Maltreatment Experiences, Self Report (ROME; Wolfe & McGee, 1994), a retrospective measure of childhood victimization comprised of five subscales: psychological abuse, physical abuse, sexual abuse, exposure to family violence and neglect.

Children's Peer Rating Scale (CPRS; adapted from Crick & Grotpeter, 1995). The CPRS is a self-report measure that includes four subscales.

Youth Self Report (YSR; Achenbach & Edelbrock, 2001). The YSR is a measure of social competence and problem behaviors. For the current study, we focused on the aggression subscale.

Procedure

The limits of confidentiality were fully explained to those who volunteered to participate, and informed consent was obtained in writing from principal caregivers and youth.

Results

Correlations between exposure to FV and PTSD symptoms

Variables	Re-experiencing	Avoidance	Hyper-arousal
Exposure to FV	.21*	.27**	.26**

Note: * $p<.005$, ** $p<.001$

Re-experiencing symptoms as moderators in the association between child exposure to family violence and aggression

Step	Independent variables	R ²	R ²	β	p
Relational aggression					
1	Exposure to family violence	--	--	.212	.016
	Re-experiencing symptoms	--	--	.110	.209
	Exp. to FV x Re-experiencing	.13	.112	.322	.002
Overt aggression					
1	Exposure to family violence	--	--	.053	.555
	Re-experiencing symptoms	--	--	.035	.698
	Exp. to FV x Re-experiencing	.006	-.017	.042	.706
YSR aggression					
1	Exposure to family violence	--	--	.035	.692
	Re-experiencing symptoms	--	--	.203	.023
	Exp. to FV x Re-experiencing	.099	.078	.290	.007

Hyper-arousal symptoms as moderators in the association between child exposure to family violence and aggression

Step	Independent variables	R ²	R ²	β	p
Relational aggression					
1	Exposure to family violence	--	--	.194	.029
	Hyper-arousal symptoms	--	--	.159	.072
	Exp. to FV x Hyper-arousal	.083	.062	.100	.439
Overt aggression					
1	Exposure to family violence	--	--	.062	.498
	Hyper-arousal symptoms	--	--	-.005	.960
	Exp. to FV x Hyper-arousal	.004	-.020	-.004	.974
YSR aggression					
1	Exposure to family violence	--	--	.043	.635
	Hyper-arousal symptoms	--	--	.134	.141
	Exp. to FV x Hyper-arousal	.059	.037	.291	.028

Note: All statistics are from the indicated steps. Each independent variable was entered in both steps; no significant main effects were found in any of the second steps.

Avoidance symptoms did not moderate the relation of family violence with any indicator of aggression.

Discussion

Our findings suggest that disturbance in affect regulation may be central to the impact of PTSD symptoms on later adjustment and specifically aggressive behaviour. Researchers (e.g., Ehlers, 2004) have suggested that intrusive symptoms consist of "re-experiencing of warning signals", the aspects of the traumatic experience that were related to a sense of threat. This explains why intrusive re-experiencing is associated with a sense of serious current threat and is frequently accompanied by emotional reactions, such as panic but also anger. Intrusive symptoms may trigger hostile attributions and aggressive behaviors to ward off perceived threat.

If trauma reactions to maltreatment experiences, such as exposure to family violence, prolong negative psychological adjustment and increase the likelihood of violence, intervention programs targeting trauma may prove effective in reducing violence and aggression in maltreated children.

Key references

- Ehlers, A., Hackmann, A., & Michael, T. (2004). Intrusive re-experiencing in post-traumatic stress disorder: Phenomenology, theory, and therapy. *Special issue: Memory: Mental imagery and memory in psychopathology*. 12 (4), 403-415.
- Kilpatrick K. L., & Williams, L. M. (1998). Potential mediators of post-traumatic stress disorder in child witnesses to domestic violence. *Child Abuse & Neglect*, 22(4), 319-330.
- Kitzmann, K. M., Gaylord, N. K., Holt, A. R., & Kenny, E. D. (2003). Child witnesses to domestic violence: A meta-analytic review. *Journal of Consulting & Clinical Psychology*, 71(2), 339-352.
- Muller, R. T., & Lemieux, K. E. (2000). Social support, attachment, and psychopathology in high risk formerly maltreated adults. *Child Abuse and Neglect*, 24 (7), 883-900.
- Newman, E. (2002). Assessment of PTSD and trauma exposure in adolescents. *Journal of Aggression, Maltreatment & Trauma*, 6(1), 59-77.
- Rossman, B. B. R., & Ho, J. (2000). Posttraumatic response and children exposed to parental violence. *Journal of Aggression, Maltreatment & Trauma*, 3 (1), 85-106.
- Stewart, A. J., Steiman, M., & Cauce, A. M. (2004). Victimization and posttraumatic stress disorder among homeless adolescents. *Journal of the American Academy of Child Psychiatry*, 43(3), 325-331.

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