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Is Maternal PTSD Associated with Greater Exposure of Very Young Children to Violent Media?

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Abstract

This study examined media-viewing by mothers with violence-related posttraumatic stress disorder (PTSD) and related media exposure of their preschool-age children. Mothers ($N = 67$) recruited from community pediatric clinics participated in a protocol involving a media-preference survey. Severity of maternal PTSD and dissociation were significantly associated with child exposure to violent media. Family poverty and maternal viewing-behavior were also associated. Maternal viewing-behavior mediated the effects specifically of maternal PTSD severity on child exposure. Clinicians should assess maternal and child media viewing practices in families with histories of violent trauma exposure and related psychopathology.

Concerns about child exposure to violent media have increased as television and video games have shown more violence. During a study of mothers with violence-related posttraumatic stress disorder (PTSD) and their preschoolers, the authors noted a link between mothers and children together compulsively watching violent media and hostile-aggressive child behavior (Schechter & Willheim, 2009). This observation inspired the present investigation of maternal PTSD and child media exposure.

Preschoolers are particularly sensitive to violent media, in part, due to their difficulty distinguishing fantasy from reality in drama (Christakis & Zimmermann, 2007). Conduct and attentional disturbances among preschoolers have been linked to violent media exposure (Christakis & Zimmerman, 2007).

Parents play a crucial role as “filters” for their young children’s media-exposure by regulating quantity, reality-testing, and aggression-associated fear. This filtering function is likely compromised among parents with PTSD. Avoidance of trauma-associated affects and/or dissociation that allows tolerance of hyperarousal, might inhibit parental attunement to preschoolers’ distress. And, some mothers with PTSD may watch violent media compulsively to control reexperiencing of trauma-related arousal-dysregulation.

We hypothesized that greater severity of PTSD and dissociative symptoms will be significantly associated with (1) mothers and (2) their children spending more time watching violent media.

Method

Participants

Study participants were mothers ($N = 104$) recruited from community pediatric clinics. Mothers were adults who suffered no disability that would preclude participation. Interviews were conducted in English and Spanish.

Measures

The Demographic and Treatment History Questionnaire, is a standard measure consisting of 33 items adapted from the Structured Clinical Interview for the DSM-IV (First et al., 1995).

The Traumatic Life Events Questionnaire (TLEQ; Kubany et al., 2000) assesses exposure to 22 life-events that could fulfil the “A-criterion” for the DSM-IV PTSD diagnosis.

Participants meeting the A-criterion for any event were given the CAPS and PCL-S. The TLEQ shows stability and convergent validity across diverse studies (Kubany et al., 2000). Assaultive trauma-related PTSD became a key predictor.

The Clinician Administered PTSD Scale (CAPS; Blake et al., 1995) was administered to determine diagnosis of PTSD. The CAPS’ overall internal consistency is high; and symptom-clusters (reexperiencing, avoidance, and arousal) represent unified constructs ($\alpha = .76-.88$) (Blake et al., 1995). The CAPS correlates well with standard self-report measures of PTSD, (i.e., within the present study, CAPS correlation with The PTSD Checklist – Specific [PCL-S], $r = .77$).

The PCL-S (Weathers et al., 1996) is a 17-item self-report checklist corresponding to the 17 PTSD symptoms in the DSM-IV. Test-retest reliability (ICC = .92-.96) and internal consistency ($\alpha = .92-.97$ for symptom clusters, and .97 for total PTSD-score) were good (Weathers et al., 1996). The PCL-S was used to assess subjectively current symptom severity.

The Dissociative Experiences Scale (DES; Bernstein and Putnam, 1986) is a 28-item self-report of dissociative experiences. In a meta-analytic study, the mean Cronbach alpha was found to be .93 (15+ studies) and test-retest correlation, .87 (5+ studies) (van IJzendoorn & Schuengel, 1996).

The Beck Depression Inventory-II (BDI; Beck, 1994) measured depressive symptoms and has high internal consistency ($\alpha > .90$) (Beck et al., 1996).

One-third of the way into this study, we added a media-preference questionnaire: The Media Questionnaire (Gleason & Zeanah, 2004). Of 104 mothers in the study, 67 completed it and compose the present sample. The Media Questionnaire asks mothers to mark “M” for mother and “C” for child on a grid listing visual media genres (television, movies, and video games). Mothers rated the viewing-frequency on a scale of: *never seen, once or twice, few times a month, at least once a week, or daily*. Movies/Videos/YouTube/DVD’s were categorized: animated, action, comedy, teenage-adventure/romance, and horror. These categories were derived from existing research (Coates, Pusser, & Coodman, 1976) and reviewed for face-validity and representativeness by clinical researchers and media-specialists. The measure explicitly targets violence noted in other media-studies (Christakis & Zimmerman, 2007). “Violent media” implied graphic violent content. The Media Questionnaire was translated into Spanish by a native- speaker and back-translated. The Media Questionnaire attained good test-retest reliability (.70).

Data Analysis

Data were analyzed continuously via multiple linear regression to maximize power and to avoid arbitrary cutoffs of subthreshold PTSD. All probabilities are two-tailed.

Results

Among the 67 mother-child participants, maternal ages ranged from 18–45 years ($M = 30$ years, $SD = 7$); child ages ranged from 12–48 months ($M = 26$ months, $SD = 10$). The sample was 86% Hispanic. The remaining 11% were African-American, and 3% “other.” The average household income was \$41,000. The average number of years of maternal education was 13. About 40% of the sample was eligible for public assistance.

Analyses were conducted to investigate which independent variables were associated with the amount of time mothers spent watching violent media. In addition to testing the predictive value of PTSD (CAPS) and Dissociative symptom severity (DES) separately as per our *a priori* hypotheses, we examined the relationship of maternal viewing time and (a) demographic variables likely to impact on media viewing (i.e., poverty, number of household occupants), (b) exposure to violent events independent of psychopathology, and (c) depressive symptoms which are frequently comorbid with PTSD. Multicollinearity was tested using the SPSS colinearity statistics that were applied to multiple regression analyses, and found not to prevent maternal PTSD from having significant effects on media viewing independently of maternal dissociation or depression.

The only variable significantly associated with the quantity of maternal violent-media viewing was current maternal PTSD-severity (CAPS) (see Table 1.), which explained 8% of the variance of maternal violent media viewing. Associated symptom-cluster frequencies when separate regressions were run on each cluster were: re-experiencing ($\beta = .26$, $p = .07$), avoidance ($\beta = .27$, $p < .05$), hyperarousal ($\beta = .28$, $p < .05$).

Multiple linear regression was applied to determine which variables were significantly associated with the amount of time children spent watching violent media. In univariate tests, maternal PTSD severity was modestly but significantly associated with child violent media exposure (see Table 2). Child exposure was also modestly associated with the number of household occupants which might impact child exposure due to overcrowding - and was negatively associated with household income as a poverty-indicator. There was no significant association with maternal violence exposure. To evaluate the strength of the relationship between PTSD severity and child exposure, household occupants and income were controlled in an adjusted model (See Table 3). Only household income retained significance. The relationship between maternal PTSD severity and child exposure became insignificant.

Since maternal dissociation was strongly co-linear with PTSD measures ($r = .55$ with CAPS; $r = .66$ with PCL-S), we decided to analyze the predictive value of these two variables separately. In univariate tests, dissociative symptom severity was strongly associated with child violent media exposure (see Table 2). Household income was similarly associated with child exposure; the number of home-occupants, modestly associated. Once adjusted for these variables (see Table 3), maternal dissociation retained a decreased association that fell short of significance ($p = .08$); household income became modestly significant; and number of household occupants, insignificant. A third linear regression showed no significant association between maternal depression (BDI) and the time children spent watching violent media. In both adjusted models (Tables 3 and 4) household income remained significantly associated with child exposure.

Not surprisingly, maternal time spent viewing violent media explained as much as 32% of the variance of child viewing-time (β unadjusted = .56, $p < .001$). Given the association previously found between maternal PTSD and child violent media viewing (β unadjusted = .29, $p < .001$), we tested a mediation model that included both maternal viewing time and severity of maternal PTSD. Both of these variables together accounted for 38% of the variance of child exposure time (β PTSD adjusted = .13, *ns*; β maternal viewing-time adjusted = .57, $p < .001$). Further analysis confirmed that maternal viewing behaviour (maternal time spent watching violent media) significantly mediated the effect of maternal PTSD on child exposure to violent media (Sobel test-value= 2.19, $p < .05$).

When maternal dissociation was entered into a regression model with mothers' viewing-time, these two variables together accounted for as much as 43% of the variance of child exposure to violent media (β mother's viewing-time = .55, $p < .001$; β maternal DES = .28, $p < .01$). Yet maternal dissociation did not significantly mediate the effects of maternal viewing (Sobel test $p > .3$).

Given its significant association with child exposure, household income was added to this model. The three factors (maternal media viewing, dissociation, household income) together contributed to as much as 49% of the variance of child violent media exposure (β mother's time = .51, $p < .001$; β DES = .22, *ns*; β household income = -.24, $p < .05$). Adjusting this last regression model for maternal PTSD severity and number of occupants did not significantly alter the model.

Discussion

Only maternal violence-related PTSD severity was associated with the amount of time mothers spend watching violent media. Child violent media-exposure was associated with maternal PTSD; but significance was lost when adjusted for psychosocial variables. Maternal dissociation, however, remained associated with child exposure even after adjustment for psychosocial variables. In both adjusted models, household income remained significantly and negatively associated with child exposure.

Maternal time spent viewing violent media was the strongest predictor of child exposure and mediated the effects of maternal PTSD on child exposure. The additive effects of maternal media viewing time, maternal dissociation - as distinct from PTSD - and household income together also accounted for nearly half of the variance of child viewing-time.

This study's results, while not conclusive, raise certain intriguing questions. The first concerns the degree to which maternal PTSD and comorbid dissociation are implicated in both maternal and child violent media-exposure. Maternal violence exposure in and of itself (i.e. without associated PTSD or dissociation) was not predictive of either one. Children's exposure is significantly associated with maternal viewing – time which, in the present study, was associated with maternal PTSD. Maternal dissociation contributed to child exposure but not to maternal viewing behaviour.

While the relationships between maternal viewing, maternal PTSD, maternal dissociation, and child exposure to violent media remain to be explored further with larger samples, controlling for psychosocial variables, the authors propose that one possible answer may lie in the central mechanisms of the comorbid yet distinct disturbances of PTSD and dissociation. Freud's "repetition compulsion" (Freud, 1920/1955), namely an effort to "master" posttraumatic fear by autonomous control of traumatic re-exposures, may help us to understand maternal behavior. Maternal PTSD severity as associated with increased maternal violent-media viewing is less syntonetic with avoidance than with PTSD re-experiencing and hyperarousal. Mothers suffering with predominant re-experiencing

symptoms of PTSD are likely to be more rather than less drawn to the relative safety of violent media.

The severity of maternal dissociation also significantly impacts child violent media exposure. While dissociation is frequently comorbid with PTSD, its mechanism is quite distinct. By dissociating emotional and thought content dimensions of memory, sense of time, or personal identity when distressed, victims of chronic interpersonal violence are often able to endure extreme interpersonal stress. This adaptive advantage may become problematic when generalized to subsequent relationships, such as parenting a child.

Mothers with significant dissociation more frequently display decreased caregiving sensitivity compared to controls (Benjamin, Benjamin, and Rind, 1996). A more dissociative mother is less aware of her child's mental states and cues (Bailey, Moran, and Peterson, 2007). Traumatized mothers who are dissociative, may well avoid or disavow (a) their child's exposure to violent stimuli as well as (b) the effects of such exposure – leading to greater child media-exposure and distress. Thus, while maternal PTSD fuels child violent media exposure, maternal dissociation fans the flames.

Given our cross-sectional methodology, we are unable to assert any certain causal relationships between maternal PTSD and maternal “choice” of media. Whether mother's program-selection represents her choice or her “acquiescence” to other family members' preferences or might be an effect of poverty requires further investigation. Poverty can at once be a risk *for* and an effect *of* violent trauma-related psychopathology (Koenen et al., 2007).

While awaiting future studies, clinicians should assume a clinically responsible position and inquire about parent-child media-viewing behaviour in the home.

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Table 1

Predictors of Maternal Exposure to Visual Media with Markedly Violent Content (N = 67)

	R-Square	F (df 1, 66)	β
Number of household occupants	.02	1.08	.13
Household income	.02	1.59	-.15
TLEQ	.04	1.92	.19
BDI	.00	< 1	.04
DES	.03	1.28	.16
PTSD (CAPS)	.08	4.10	.28*

Note. TLEQ = Traumatic Life Events Questionnaire; BDI = Beck Depression Inventory; DES = Dissociative Experiences Scale; CAPS = Clinician Administered PTSD Scale.

*
 $p < .05$.

**
 $p < .01$.

 $p < .001$.

Table 2

Univariate Predictors of Child Exposure to Visual Media with Markedly Violent Content (N = 67)

	R-Square	F (df 1, 66)	β
Number of household occupants	.10	7.03	.31 *
Household income	.14	10.91	-.38 **
TLEQ	.01	< 1	.11
PTSD(CAPS)	.08	4.46	.29 *
DES	.14	8.01	.38 **

Note. TLEQ = Traumatic Life Events Questionnaire; DES = Dissociative Experiences Scale; CAPS = Clinician Administered PTSD Scale.

*
 $p < .05$.

**
 $p < .01$.

 $p < .001$.

Table 3

Maternal PTSD as Predictor of Child Exposure to Visual Media with Markedly Violent Content (N = 67) –
Adjusted for number of household occupants and household income

	R-Square	F (df 3, 64)	β
Number of household occupants	.14	10.91	.20
Household income			-.36 *
PTSD (CAPS)			.10

Note. TLEQ = Traumatic Life Events Questionnaire; CAPS = Clinician Administered PTSD Scale.

*
 $p < .05$.

**
 $p < .01$.

 $p < .001$.

Table 4

Maternal Dissociation as Predictor of Child Exposure to Visual Media with Markedly Violent Content (N=67)
 - Adjusted for number of household occupants and household income

	R-Square	F (df 3, 64)	β
Number of Household Occupants	.28	6.04	.18
Household Income			-.33*
DES			.24

Note. DES = Dissociative Experiences Scale.

*
 $p < .05$.

**
 $p < .01$.

 $p < .001$.