

## Parenting Stress as a Mediator of Exposure to Potentially Traumatic Events and Behavioral Health Outcomes in Children and Youth

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### Short Communication

The environment in which children grow and develop is vital to the trajectory of their development [1]. Risk and protective factors increase or decrease the likelihood of developmental disruptions and the onset of psychopathology [1,2]. Risk factors such as poverty, maternal depression, maternal substance use, parenting stress and exposure to potentially traumatic events such as family and community violence have been shown to impact on development and place children at risk for the onset of psychopathology [3-10].

Due to the contextual nature of child development, many researchers have adopted a developmental ecological perspective, which incorporates child, family, community, cultural and societal characteristics [11-13]. Within each of these domains are risk and protective factors (i.e. factors that increase or decrease the likelihood of problems) for children's mental health outcomes. Given that these domains mutually influence each other and are often intertwined in their influences on outcomes, researchers working within this model not only identify the risk and protective factors at the child, family and environmental levels but also examine how these factors are related, both individually and collectively, to developmental outcomes [14,15]. This comprehensive approach to understanding risk and protective factors is essential for the development of prevention and intervention strategies aimed at decreasing the incidence of young children with severe emotional and behavioral disorders [16].

Research suggests that exposure to potentially traumatic events is prevalent with nearly 60 percent of US children witnessing or experiencing a potentially traumatic event in the past year with 10 percent of that sample reporting 5 or more exposures [17]. Studies have demonstrated that exposure to potentially traumatic events negatively impacts behavioral health outcomes for children receiving services within integrated behavioral health networks of care [18,19]. With the goal of improving behavioral health outcomes for children and youth exposed to potentially traumatic events, researchers have begun to examine protective factors that may mediate the relationship between childhood exposure to potentially traumatic events and behavioral health outcomes. The identification of these variables can provide targets for intervention that may improve outcomes for children.

Our research team has been examining parenting stress, defined as stress that parents feel in their parenting role, as a mediator of behavioral health outcomes for children exposed to potentially traumatic events. In our initial work we found that parenting stress, which is the adverse impact of efforts to adapt to parenting tasks and roles, partially mediated the relationship between family violence and trauma exposure and symptoms of post-traumatic stress in a sample of

154, 3-6 year old children living in an urban setting [20,21]. Families in this study were seeking mental health, development screening and intervention services for their children. Parent and caregiver report indicated that these children had experienced an average of 4.9 different types of potentially traumatic events and that nearly one-quarter of the children had symptoms indicating a clinically significant level of post-traumatic stress and another 16.2% of the children experienced subclinical, but potentially problematic post-traumatic stress. The results of a path analysis suggest that exposure to potentially traumatic events is related to a higher level of posttraumatic stress symptomatology for young children and that higher parenting stress levels are related to more post-traumatic stress symptoms in the child. Analyses also revealed that the child's exposure to more potentially traumatic events was related to higher levels of stress in the caregiver role for the parent/caregiver.

In a second study we examined how parenting stress mediated the relationship between a history of interpersonal trauma (physical abuse, sexual abuse, witnessing domestic violence) and internalizing and externalizing problem behaviors [22]. This sample included 194 school-aged children (5-19 years of age), who have serious emotional disturbances and had received services within a school-based behavioral health network of care. The results suggest that parenting stress mediates the relationship between exposure to potentially traumatic events and internalizing problem behaviors for this sample of children and youth. Mediation approached significance when examining the relationship between exposure to potentially traumatic events and externalizing problem behaviors.

In a third study path analyses were conducted to examine whether parenting stress mediates the relationship between exposure to potentially traumatic events and problem behaviors in a sample of 256 children under the age of 6 who present with social and emotional difficulties and who were receiving services in a community-based integrated network of care [23]. Results at baseline demonstrated that the number of potentially traumatic events that the child was exposed to was related to higher levels of parenting stress, which in turn was related to higher levels of both internalizing and externalizing problem behaviors in the child. Results demonstrated that parenting stress mediated the relationship between the number of potentially traumatic events the child was exposed to and both internalizing and externalizing problem behaviors. These analyses were repeated using 6-month follow-up data, which revealed that parenting stress continued to mediate the relationship between exposure to potentially traumatic events and internalizing problem behaviors but significant paths were no longer present when externalizing problem behaviors was the outcome.

The results of these studies demonstrate the interplay between a child's exposure to potentially traumatic events and their parent/caregiver's report of stress related to parenting their child. The results also indicate the role that parenting stress has in mediating the impact of exposure to potentially traumatic events and behavioral health outcomes for children across the age-span as parents with lower levels of stress in their caregiving role seem more able to assist the child to metabolize the trauma exposure in a way that minimizes the behavioral health impact of this exposure. These findings clearly indicate that providing support to parents to help them to minimize their stress related parenting a child who has been exposed to potentially traumatic events will yield significant improvements in the child's behavioral health outcomes.

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