Acute Onset Disaster

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Acute onset disasters impact children's and adolescents' psychological well-being, often leading to mental health challenges. The way a young person copes with the event plays a significant role in development of post-disaster psychopathology. Coping has been widely studied after acute onset disasters, however, difficulties conducting research in post-disaster contexts and the individualized nature of coping make accurate assessment of coping a significant challenge.

Keywords: coping ; post-traumatic stress ; adolescents ; children ; disaster

1. Introduction

Sudden onset disasters, such as hurricanes, wildfires, tsunamis, and terrorist attacks leave survivors susceptible to adverse mental health outcomes, such as post-traumatic stress disorder (PTSD), depression, and anxiety [1][2][3]. Children and adolescents are among the most vulnerable to mental health difficulties after these disasters because they have less experience and knowledge on how to cope with these events [3][4]. In addition to disaster exposure, young people can experience a host of secondary stressors including separation from family and friends, loss of pets, displacement from home and school, and lack of basic needs, such as food, water, and medical care [4]. Common disaster-related distress reactions in children and adolescents include internalized symptoms, such as acute stress disorder, PTSD, depression, or generalized anxiety; and externalizing symptoms, such as behavior problems, substance abuse, and aggressive behaviors [5][6][7][8].

While many young people will experience disaster-related distress, most will adapt to their environment with only a subset experiencing sustained psychopathology. The development of psychological distress in children and adolescents has been closely linked to a myriad of risk and protective factors. Factors that put a young person at risk for mental health distress can include high levels of disaster exposure, low parental support, social isolation, poverty, and pre-existing mental health symptoms such as anxiety and depression [6][8][9]. Conversely, protective factors, such as peer social support, school connectedness, supportive parenting, problem solving, self-regulation skills, perceived self-efficacy, and positive maternal–child relationships can buffer the psychological impact of large-scale sudden-onset disasters [6][10].

The way children and adolescents cope may also serve as a protective or risk factor for post-disaster psychological symptoms. A young person's ability to utilize adaptive or active coping methods, for example, can function as a barrier to the development of trauma-related symptomology [11]. Research has also indicated that acceptance, emotional expression, and cognitive reframing may buffer the psychological impact of a disaster on young people [6][12][13]. Alternatively, avoidant coping strategies, blame and anger, and social withdrawal have all been associated with higher levels of depression and post-traumatic stress symptoms in young people [14][15][16][17][18].

The accuracy of measures used to assess children's coping and post-disaster mental health is essential in order to draw valid conclusions from study results. Post-disaster environments present unique challenges for conducting rigorous research [19]; one such challenge is finding valid, reliable psychological measures that can be feasibly accessed and administered within the constraints of a post-disaster setting. Balaban [20] recommended that post-disaster research should include relatively short, standardized questionnaires that can be administered by non-clinicians and that have previously demonstrated strong reliability and validity in post-disaster settings. Establishing strong psychometric properties for coping measures with the specific populations studied is necessary to ascertain content validity of the measure, given that coping is affected by a myriad of changing influences, such as individual characteristics, culture, and context. Even when examining psychometrically well-established measures, previous reviews have found a high degree of inconsistency in how dimensions of coping were described, making it difficult to draw valid conclusions across studies and measures [21].

2. Coping with Acute Onset Disaster

Post-disaster contexts are notoriously difficult settings in which to conduct rigorous research due to the many practical barriers, such as the rapid nature of response, loss of resources, damaged infrastructure, and ethical and clinical considerations for working with trauma-affected populations. Thus, researchers are often met with significant challenges in obtaining consent, recruiting participants, acquiring funding, and developing rigorous study designs [19].

Few surprises were found among the relationship between coping strategies and PTSD symptoms. In general, active or positive coping mechanisms were either inversely related to PTSD symptomology or positively correlated with symptoms at a smaller magnitude than passive or negative coping mechanisms. Youth who reported more frequent use of coping strategies, such as rumination, negative coping, emotion-focused, escape-oriented and avoidance coping, and blame and anger were more likely to experience higher PTSD symptoms than peers who did not rely as much on these coping methods. Of the three studies that reported changes over time, the association between coping and PTSD weakened over time in two studies [12][22]; and remained stable across three time points in the third study [15].

Belief in the ability to cope (such as reminding yourself of your capacity for resilience) and youth's beliefs in their own capacity to cope in a healthy way were weakly correlated with PTSD symptoms [12]. Scholars have consistently found that coping self-efficacy is associated with lower rates of PTSD in trauma-affected children and adolescents [23][24]. Unfortunately, few studies in the reviewed articles incorporated measures of coping self-efficacy, and those that did, did not include additional measures examining coping styles or strategies. In post disaster settings, practitioners and researchers should assess both children and adolescents coping self-efficacy and ways of coping, which would provide a deeper understanding of most appropriate post-disaster mental health prevention and treatment interventions.

Maintaining typical roles and routines in family and school settings was also inversely associated with PTSD symptoms [25], suggesting that consistent relationships and interactions are important to help youth manage post-disaster stress and emotions. Establishment of roles and routines is a form of coping assistance that families, clinicians, and educators can use to help children and youth restore a sense of normalcy and predictability in a post-disaster environment.

Included studies that measured distraction identified the strategy as maladaptive/negative and related to more severe PTSD symptoms. Historically, distraction has been classified as both helpful and harmful for trauma-affected youth [6][26]. Distraction may be used to mask feelings of grief, which could potentially have a negative long-term impact on children and adolescent adjustment. Conversely, young people may use distraction to reduce rumination or continuous thoughts about the event (e.g., doing fun things to not think about the stressor). Distracting oneself as an escape- or avoidance-focused coping strategy was not especially highly associated with PTSD symptoms compared to other escape/avoidance strategies in the reviewed studies. However, having others (family, teachers, or peers) distract youth from the trauma was strongly associated with PTSD symptoms [25]. A possible explanation for why self-distraction was not as strongly associated with PTSD as distraction efforts by others may be that the distraction efforts by others are a response to signs that a young person is having trouble coping e.g., "I can see that they are struggling, so I will try to take their mind off it"—whereas youth who distract themselves might be using the strategy more effectively to manage post-disaster stress. Therefore, it is important to conceptualize how distraction is assessed to understand the relationship of this coping style with psychopathology in disaster affected children and youth.

Finally, intrusive rumination was highly correlated with PTSD symptoms [27]. This is unsurprising as research has consistently found that ruminative thoughts such as future-oriented worry and repeatedly thinking about or replaying a trauma is associated with greater PTSD symptoms [28]. This reaffirms the need for interventions focused on positive cognitive restructuring and building coping competency beliefs, which have been effective at reducing incidents of intrusive and repetitive rumination [29][30].

3. Conclusions

Understanding the relationship between coping with sudden onset disasters and post-traumatic stress in young people is critical to support their short and long-term psychological well-being. Improved knowledge of this important relationship can also guide the design and delivery of post-disaster interventions for children and adolescents.

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