Cutting edge research on trauma and childhood maltreatment.

This series helps to bridge the gap between academic researchers and busy professionals. Here we provide summaries of nine research studies, published between January and June 2022, which provide new evidence with practical implications, highlighting a range of understudied and clinically relevant issues.

In this issue

► Three studies showed that minoritized and understudied groups of young people, such as refugees (McEwen et al., 2023) and the LGBT+ community (Jonas et al., 2022), tend to experience more interpersonal traumatic events and more severe mental health symptoms than their peers.

► In the case of children in care, trauma symptoms (due to clinicians’ decision-making biases) tend to go unnoticed and potentially untreated (McGuire et al., 2022). This is an important issue, as highlighted by the recent findings of Zhang and colleagues (2022) showing that many untreated children experience elevated secondary trauma symptoms, such as depression, several months post-trauma.

► Two studies examining trauma-focused cognitive behavioural therapy (TF-CBT) found that when it was delivered either in its standard therapist-led format or in an innovative parent-led format, it can be effective in reducing secondary trauma symptoms like depression and behavioural difficulties (Salloum et al., 2022), and can improve executive functioning (Lee and Brown, 2022). However, it’s important to note that a history of trauma among caregivers may interfere with the effectiveness of TF-CBT. This can occur when caregivers display avoidant behaviours or place blame during therapy sessions (Canale et al., 2022).

► Finally, two studies showed that childhood maltreatment experiences are linked to alterations in a range of social and emotional factors, important in determining mental health outcomes, such as social skills (Bender et al., 2022) and effort-based reward processing (Armbruster-Genç et al., 2022).
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### Impact of trauma

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Canale and colleagues (2022) examined whether caregivers’ trauma history, children’s baseline symptom severity and children’s distress during therapy sessions are associated with four areas of caregivers’ behaviour that are known to influence the outcome of trauma-focused cognitive behavioural therapy (TF-CBT): support (parental concern, empathy, and care expressed for the child in relation to the trauma); cognitive-emotional processing (the extent to which a caregiver engages and attempts to make sense of issues related to the child’s trauma); avoidance (the attempt of the caregiver to distance or pull themselves away from trauma-related issues, cues and emotions); blame/criticism (the caregiver blaming or criticizing the child for the trauma occurrence and trauma-related difficulties). Seventy-one child-caregiver dyads participated in this study (children: mean age = 12; female = 69%; 56.3% = White, 36.6% = Black, 4.2% = Hispanic/Latino, 2.8% = multiracial; caregivers: mean age = 43; female = 90%; no ethnicity information was specified for the parents). The caregivers’ trauma history was assessed via structured interviews, the children’s symptoms were measured with questionnaires, and audio-recorded TF-CBT sessions were used to assess parental behaviour and children’s distress. The researchers found that children’s symptoms at baseline (internalizing, externalizing, trauma symptoms) did not predict caregivers’ behaviours. Greater caregivers’ trauma exposure was associated with more avoidance and cognitive-emotional processing. Greater caregivers’ avoidance and blame/criticism were associated with higher levels of children’s distress during sessions. In sum, this study shows that caregivers’ trauma history and children’s level of distress during TF-CBT are associated with elevated caregivers’ behaviours known to reduce treatment efficacy, such as avoidance and blame/criticism.

Lee and Brown (2022) examined whether trauma-focused cognitive behavioural therapy (TF-CBT) is beneficial for improving executive function skills (e.g. the explicit ability to plan, problem-solve, and manage emotional responses and behaviour) in children exposed to interpersonal childhood trauma (n = 278; mean age = 12; female = 76%; Hispanic = 42%; Black = 22%; multiracial = 18%; non-Hispanic White = 9%; Asian = 4%, Guyanese = 3%; unknown = 1%). The researchers found that TF-CBT led to post-intervention improvements in overall parent-rated executive functioning, especially in the deliberate regulation of emotion and behaviour.

This, in turn, was associated with a reduction in post-traumatic stress disorder (PTSD) symptoms in adolescents but not in children. **In sum, the results of this study suggest that TF-CBT can lead to a reduction in executive functioning difficulties in children and that such change may be associated with PTSD symptom improvements.**


**Interventions**

Knowledge about a child being in foster care biases clinicians’ judgments about PTSD diagnosis and treatment decision-making

**McGuire and colleagues (2022)** examined whether the diagnosis of post-traumatic stress disorder (PTSD) and treatment recommendations may be influenced by the knowledge that a young person receives statutory care. UK mental health professionals (e.g. psychiatrists, clinical psychologists, mental health nurses) working primarily in child and adolescent mental health services completed an online survey (n= 270; female = 84%; age range = 18-66+; information on the ethnic background was not provided). Professionals were randomly assigned one of two identical clinical vignettes describing a boy experiencing PTSD, with the only difference being that in one case, the child was in foster care, while in the other, the child lived with his mother. Professionals were then required to identify a primary diagnosis, a treatment approach, and a potential secondary diagnosis. Those professionals randomised to the foster care vignette were less likely to give a primary diagnosis of PTSD and select a recommended evidence-based PTSD treatment. This is consistent with previous findings showing that PTSD is often underdiagnosed in child welfare settings. Also, choosing PTSD as the primary diagnosis increased the likelihood of choosing an evidence-based treatment for PTSD. In sum, children in care may be less likely to be correctly diagnosed with PTSD, potentially preventing access to relevant trauma-focused evidence-based treatment.

Interventions

A new parent-led trauma-focused intervention effectively reduces secondary mental health symptoms in children and parents following trauma exposure.

Stepped-care trauma-focused cognitive behavioural therapy (SC-TF-CBT) is a parent-led, therapist-assisted treatment developed as a potential first-step intervention. For those who do not benefit from the parent-led intervention, standard therapist-led TF-CBT is provided as the second step. Salloum and colleagues (2022) examined the effectiveness SC-TF-CBT in reducing secondary mental health outcomes in children (internalising symptoms, externalising behavioural difficulties, sleep disturbances) and their carers (post-traumatic stress symptoms, depression and parenting stress). Secondary mental health symptoms were assessed at baseline, post-treatment and at 6- and 12-months follow-ups in 183 child-caregiver dyads, with half receiving SC-TF-CBT and the other half standard TF-CBT (children: age range = 4-12; female = 55%; White = 51%, Black = 31%, mixed race = 17%, Asian = 1%; parents: female = 87%; White = 62%, Black = 36%, American Native = 2%). The authors found that improvement in all secondary outcomes was comparable for SC-TF-CBT and TF-CBT at follow-up. In sum, SC-TF-CBT was found to be a promising parent-led trauma-based intervention for reducing secondary mental health outcomes in children and parents.

Impact of trauma

Reduced brain activity during reward and effort processing, found in children who have experienced maltreatment, predicts future depression and anxiety symptoms

Armbruster-Genç and colleagues (2022) examined whether childhood maltreatment affects the brain system responsible for deciding if potential rewards are worth the effort to obtain them. A group of children and adolescents with documented childhood maltreatment (n = 37; age range = 10-16; females = 57%; White = 41%, Black = 22%, Asian = 8%, multiple ethnic backgrounds = 27%) and a group of peers without documented childhood maltreatment (n = 33; age range = 10-16; females = 64%; White = 39%, Black = 27%, Asian = 6%, multiple ethnic backgrounds = 21%) participated in this study. While their brain activity was being measured, they completed an effort-based reward game in which they had to decide whether to exert varying levels of physical effort (hand squeeze) to gain points. Children’s depression and anxiety symptoms were follow-up 18 months later. The researchers found that a history of childhood maltreatment was associated with reduced effort-related activation of the anterior cingulated cortex (ACC), a critical brain region involved in reward processing. Moreover, this pattern of reduced brain activation among children with a history of maltreatment increased the likelihood of them experiencing higher depression and anxiety symptoms 18 months later. This is consistent with previous studies showing reduced ACC activation during effort processing in individuals with higher behavioural apathy (a common symptom in depression). In sum, following maltreatment exposure, a pattern of reduced brain response in the ACC during reward and effort processing predicts future symptoms of depression and anxiety.

Impact of trauma

Socio-emotional development and mental health outcomes are affected by exposure to intimate partner violence during childhood

Bender and colleagues (2022) systematically reviewed the evidence on the impact of intimate partner violence (IPV) exposure during childhood on children’s socio-emotional competence (e.g., social skills, empathetic abilities, emotion regulation). Twenty-six studies were included (sample size, age range, gender, and ethnic composition of each study are summarised in the article; a composite value of these variables is not available). Most studies found that a history of exposure to IPV is associated with lower social competence and emotion regulation skills in children and adolescents. There was little evidence suggesting that IPV exposure affects empathic skills. Moreover, better socio-emotional competence was shown to reduce the likelihood of poor behavioural and psychological difficulties following IPV exposure. In sum, IPV exposure can negatively influence the development of social and emotional skills which are important to resilient mental health outcomes.

Impact of trauma

The impact of childhood trauma on the mental health of LGBT+ youth

**Jonas and colleagues (2022)** systematically reviewed and analysed the data of studies on adverse childhood experiences and mental health among LGBT+ young people. 24 studies were included (total n = 199,285 participants, of whom 26,505 identified as LGBT+; overall mean age = 16; overall, female participants made up the largest percentage of most studies, ranging between 11% and 74%; overall, White participants made up the largest proportion across studies, between 8% and 96%). The researchers found that LGBT+ young people tend to experience more interpersonal traumatic events (with one study suggesting up to a tenfold increase) compared to their heterosexual or cisgender counterparts, with sexual abuse being the most reported adverse experience (30%), followed by verbal abuse (29%), physical abuse (27%) and cyberbullying (19%). LGBT+ young people were also at greater risk of mental health problems, with 40% experiencing depression and 32% anxiety. The authors conclude that more advocacy and support are required for LGBT+ young people who experience trauma and mental health difficulties. Also, more research is needed in which participants are followed-up over time to examine how traumatic childhood experiences in LGBT+ young people impact future mental health. **In sum, this systematic review and meta-analysis finds that LGBT+ young people are at greater risk of experiencing trauma as well as depression and anxiety symptoms.**

Impact of trauma

The experience of traumatic events that violate moral values is associated with poor mental health outcomes in young refugees.

McEwen and colleagues (2023) examined the mental health impact among young people with refugee backgrounds (n= 85; age range = 16–25; female = 59%; country of birth: Asia = 44%, Africa = 38%, Middle East = 17%, other = 1%) of traumatic events that violate important moral values (“moral injury”). These can include a wide range of traumatic experiences, such as exposure to torture and sexual assault, leaving family members behind when fleeing persecution, witnessing sacred religious objects being defiled, or being forced to commit violent acts. Questionnaires assessed moral injury, traumatic experiences, and mental health. Consistent with findings among adults, the researchers found that young refugees experienced high levels of moral injury, discrimination, stressful life events and mental health symptoms. The experience of moral injury was associated with poor mental health, including elevated externalising, internalising and trauma-related symptoms. **In sum, this study suggests that the experience of moral injury among young people with a refugee background may contribute towards an increased risk of experiencing mental health difficulties.**

The ‘natural trajectory’ of depression and trauma-related symptoms after exposure to a single-incident trauma in children and adolescents

Zhang and colleagues (2022) examined how depression and post-traumatic stress symptoms (PTSS) unfold in the initial months after trauma exposure (when no therapeutic input is provided). Children and adolescents attending hospital emergency departments due to exposure to a single-incident trauma (e.g., assault, road traffic accident and accidental injury) took part in this study (n = 217, age range = 8-17, females = 43%, ethnicity was not reported). Ten participants who were referred for treatment were not included. PTSS and depression symptoms were assessed 2 weeks, 2 months, and 9 months after trauma exposure. Moreover, a range of potential psychological risk factors was assessed at 2 weeks post-trauma. The researchers found that PTSS and depression symptoms trajectories were highly consistent. Most participants (approximately 80%), even among those who showed elevated symptoms in the initial weeks post-trauma, had PTSS and depression symptoms below clinical range 9 months post-trauma, 20% of participants showed clinically significant symptoms of depression throughout the study. Moreover, the researchers found that negative appraisals measured at 2 weeks (i.e. the presence of maladaptive and excessively threatening interpretations of the traumatic event and its consequences) were an important shared risk factor for elevated symptoms of both PTSS and depression.

In sum, this study shows that elevated depression symptoms can persist for several months after single incident trauma exposure in a minority of untreated children.
