Research Round Up
Q1+Q2 | 2023
Research highlights from the field of childhood trauma

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Cutting edge research on trauma and childhood maltreatment.
The Research Round Up series helps to bridge the gap between academic researchers and busy professionals. This publication provides summaries of ten research studies, published between January and June 2023, which provide new evidence with direct practical implications and highlight a range of understudied and clinically relevant issues in the field of trauma and childhood maltreatment.

In this issue

► Four studies examined different aspects of trauma treatment, including group-based interventions (Davis et al., 2023), a drop-out management programme (Eslinger et al., 2023), the effectiveness of current evidence-based trauma treatments for children exposed to single or multiple traumatic events (Hoppen et al., 2023), and the potential bias of parental reported symptoms of traumatic stress (Bailey et al., 2023).

► Three studies investigated the unmet social needs and mental health risk among children exposed to distinct traumatic events, such as racial trauma and stress (Roach et al., 2023), single-incident traumatic events leading to hospitalization (Haag et al., 2023) or foster care (Phillips et al., 2023).

► One study examined the potentially causal association between childhood maltreatment and attention deficit/hyperactivity disorder (ADHD) (Bali et al., 2023).

► Finally, two studies examined how different types of early adversity (interpersonal maltreatment vs socioeconomic disadvantage) (Vannucci et al., 2023) and different developmental timing of maltreatment exposure (early childhood vs adolescence) (Zhu et al., 2023) have a differential impact on brain structure and function.

* The asterisk symbol denotes that at least one of the authors is a current member of the UK Trauma Council.

Each summary lists the size, age, ethnicity, and gender of the sample according to the terms given in the source literature. However, we recognise that there is not a clear consensus on how these terms are (or should be) presented in the literature, and that in some cases terminology and categorisation may cause unintended offence or harm. We are continuously discussing how to use language addressing race, ethnicity and gender when writing about research and are open to feedback on how this can be improved in our research communication and dissemination. Please send feedback on language or our approach to uktc@annafreud.org.
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Interventions

A review of group-based interventions for treating post-traumatic stress symptoms in children and young people

This article by Davis and colleagues (2023) aimed to investigate whether group-based interventions could effectively help children and adolescents who have been exposed to trauma. To do so, the researchers analysed data from 42 published studies (n = 5998; mean age = 12.4 (range 6-19); female = 52.9%; ethnicity information, when available, was provided for each study). The majority of studies included participants who had been exposed to interpersonal trauma (76.2%).

They found that children who underwent group-based interventions showed significantly reduced post-traumatic stress disorder (PTSD) symptoms compared to those in control groups (i.e. no treatment or other forms of treatment-as usual, such as skills-based psychoeducation and social care support). These interventions, particularly those based on cognitive-behavioural therapy principles, also helped alleviate depression symptoms. Interestingly, this positive impact was observed across different income settings, trauma-exposed groups, and whether caregivers were involved or not. Finally, in studies where comparisons between individual and group interventions were available, individual trauma-focused interventions were found to be superior to group interventions. In sum, although individual trauma-focused interventions are superior to group interventions, group interventions may provide effective treatment for PTSD, which can be useful when individual intervention is not possible.

This study by Eslinger and colleagues (2023) examined the effectiveness of a programme for reducing treatment dropouts among children undergoing treatment for trauma-related symptoms. One group of children received standard trauma-focused evidence-based treatments (n = 99; mean age = 11.11 (range 4-17); female = 83.8%; Black/Multi-racial = 10.1%, White 89.9%), while another group also received an Alliance Building Dropout Management (ABDM) programme (n = 104; mean age = 9.83 (range = 3-17); female = 58.7%; Black/Multi-racial = 25.0%, White = 75.0%). The ABDM program, initiated at the start of treatment, encompasses four key components: i) Establishing a robust child-clinician / caregiver-clinician alliance; ii) Cultivating caregiver commitment to intervention services; iii) Enhancing caregiver confidence to address their child’s needs effectively; iv) Offering language services for non-English speaking and/or non-hearing children and their families. This programme also includes mental health education, systematic progress assessments through straightforward surveys, regular check-ins and addressing potential challenges in treatment completion for families at risk of dropout.

The researchers examined various factors like the child’s gender, race, ethnicity, age, guardianship, behavioural problems, and participation in the ABDM programme to understand their influence on completing treatment. Of all of these factors, those in the ABDM programme (as compared to those not in the programme) and those in foster care (as compared to those living in biological homes) were less likely to drop out of treatment. In sum, this study suggests that implementing a dropout management programme that aims to improve communication and connection among the client, caregiver, and therapist can be crucial in reducing the likelihood of young people discontinuing their trauma-based treatment.

The aim of this study by Haag and colleagues (2023) was to understand what kind of support young people need, during different stages of their recovery, after being admitted to a hospital following a single-incident traumatic event. The researchers conducted qualitative interviews with children and young people who experienced a traumatic event and were hospitalized afterwards: n = 30; mean age = 12.03 (range = 7-16); female = 23.3; Caucasian = 100%.

They found that while the youths appreciated care and attention during their hospital stay, they struggled to return to normal life afterwards and faced obstacles in doing so. Family and friends were the most important sources of emotional support, and conversations about the trauma mostly happened with them rather than teachers or other adults. In sum, this study suggests that a network of various supportive relationships, including parents and peers, is vital in helping young people return to normal life and recover from single incident trauma.

This article by Hoppen and colleagues (2023) examined if treatments for post-traumatic stress disorder (PTSD) in children and adolescents are less effective when individuals experienced multiple traumatic events instead of just one. To do so, the researchers analysed data from 51 studies (n = 4295; age range and gender of participants, and country of each study was provided in the supplementary document).

The researchers found that psychological treatments were effective in reducing PTSD symptoms for both single-trauma and multiple-trauma cases when compared to individuals who received no treatment (i.e. passive control condition). Psychological treatments were also more effective in reducing PTSD symptoms for individuals who experienced multiple-trauma when compared to individuals who received other forms of interventions (i.e. an active control condition, such as supportive counselling or meditation). However, more studies are required that directly compare psychological treatments for single-trauma cases with an active intervention. In sum, the findings suggest that psychological interventions can be beneficial for treating PTSD in young individuals, regardless of whether they experienced one or multiple traumatic incidents.

This study by Phillips and colleagues (2023) examined mental health provision for young people in care in the United Kingdom. Researchers used information from social care records of young individuals in care (n = 112; mean age = 10.7; female = 48%; Caucasian = 87%, Black = 4%, Mixed Ethnicity = 5%, Other = 4%).

The researchers found that most children and young people (81%) were referred to mental health services during their first year of being in care, primarily for emotional or behavioural difficulties. They discovered that those showing more behavioural problems were more likely to be referred than those with anxiety or depression symptoms. However, even though many accessed mental health services in their first year (66%), about 44% of them did not continue getting help, often due to placement changes or disengagement. Also, they found that receiving mental health support in the first year of being in care did not result in improvements in mental health outcomes. In sum, the research highlights that while mental health difficulties among children in care can be recognized quickly, accessing and maintaining support can be challenging, which may impact overall mental health outcomes.

This study by Bailey and colleagues (2023) examined how well parents and their children agree on the child’s experiences of post-traumatic stress disorder (PTSD) symptoms following a traumatic event. Researchers examined parent-child agreement on post-traumatic stress symptoms severity reports and explored whether parent’s own trauma-related symptoms influenced the perception of their child’s symptoms. Heart rate was also measured during a trauma narrative task as a possible independent indicator of child post-traumatic stress symptoms. This study involved 132 parent-child pairs after the child was hospitalised due to a single traumatic event (Children: mean age = 9.8; female = 37.9%; White = 91.7%, Mixed = 3%; Asian = 3%; Caribbean or Black = 0.8%, Other = 1.5%; Parents: mean age = 39.7; female = 90.2%).

The findings showed that there was only a weak agreement between parental and self-reported children’s post-traumatic stress symptoms severity. Surprisingly, parental reports of their children’s post-traumatic stress symptoms were better predicted by the parents’ own trauma symptom levels than the children’s self-reported symptoms. In other words, parents’ own trauma-related symptoms seemed to influence the perception of their child’s symptoms. Additionally, children’s self-reported symptoms aligned more closely with their heart rate measurements than the reports provided by their parents. In sum, this research suggests that children’s own reports of their PTSD symptoms might provide a more accurate picture of their distress following a traumatic event compared to what their parents report.

In this article Bali and colleagues (2023) reviewed the existing literature on the relationship between childhood maltreatment and attention deficit/hyperactivity disorder (ADHD). Their goal was to examine if maltreatment exposure is directly responsible for causing the emergence of ADHD symptoms or vice versa. In order to do so, the researchers focused on the sequence of events – whether the experience of maltreatment precedes the onset of ADHD symptoms or vice versa. To accomplish this, the authors reviewed 11 studies that followed individuals over time (n = 56,019 children and 14,770 adults with childhood experience of maltreatment and ADHD symptoms, including controls; no other information about gender, age or ethnicity was provided in this article).

The researchers found evidence suggesting that childhood maltreatment predates and increases the risk of developing ADHD, as well as the opposite – that the presence of ADHD symptoms precedes and increases the risk of experiencing childhood maltreatment. Additionally, they identified varying explanations for this association, including the possibility of childhood maltreatment leading to ADHD through biological changes or ADHD contributing to maltreatment through parental stress. However, despite these initial findings, the study highlighted the need for more research to untangle the complexities of this relationship and determine the exact cause-and-effect dynamics between childhood maltreatment and ADHD.

In sum, this review supports the notion of a robust connection between childhood maltreatment and ADHD, emphasising the need for additional research to untangle the potential causal relationships between the two.

Impact of trauma

A review of the relations between race-related stress and trauma with difficulties in managing emotions

In this review of the literature Roach and colleagues (2023) investigated the connection between race-related stress and trauma (RST) and difficulties in managing emotions among young people from diverse racial and ethnic backgrounds. The researchers summarised 29 existing studies on this topic (n = 78,173; age range: 5-24; information on gender was not provided; ethnicity information was provided for each study). The findings consistently indicated that higher levels of RST were associated with greater difficulty in managing emotions, such as increased dwelling on negative feelings or thoughts (i.e. rumination), loss of emotional control, heightened emotional reactivity, anger, and aggression. The researchers also found that the relationship between RST and emotion regulation was influenced by various factors. These included how individuals cope with stress more broadly (e.g. use of adaptive emotion regulation strategies), biological factors (e.g. heart rate), and aspects of their identity (e.g. racial socialisation). Moreover, the review highlighted that RST had an impact on overall well-being through its association with emotion regulation. In sum, the review suggests that the more exposure young people have to race-related stress and trauma, the more likely they are to struggle with dealing with their emotions, leading to decreased well-being.

Impact of trauma

The unique influence of interpersonal trauma and socioeconomic disadvantage on brain development

This article by Vannucci and colleagues (2023) explored how early-life adversity impacts the development of the brain in children and adolescents. Researchers conducted a review involving 82 studies which examined interpersonal early adversity, such as maltreatment within their families, and socioeconomic disadvantage, such as poverty (n = 27,234; age range = 0-18; female = 49%; information on race or ethnicity was not provided).

Compared to those who didn’t encounter adversity, young individuals exposed to interpersonal trauma exhibited larger brain volumes in frontal and limbic regions of the brain which are crucial for emotions and decision-making during childhood, suggesting accelerated development. However, as they reached adolescence, these brain regions showed smaller volumes in those who had been exposed to trauma. Conversely, children experiencing socioeconomic disadvantages had smaller brain volumes in temporal and limbic brain areas which are linked to memory and emotions during childhood, indicating a delay in maturation. However, as they grew older, these differences in brain volumes became less pronounced. In sum, this study indicates that varying types of early adversity, such as interpersonal trauma and socioeconomic disadvantage, impact specific brain regions at different times in development.

This study by Zhu and colleagues (2023) examined whether there are specific periods during a person’s development when experiences of maltreatment has a more pronounced impact on the brain regions that respond to danger, such as the amygdala, hippocampus, anterior cingulate, inferior frontal gyrus and ventromedial and dorsomedial prefrontal cortices. In this study, unmedicated participants underwent brain scanning while they viewed threatening and neutral facial images (n = 202; age range = 20-25; gender was considered as a variable in the analyses but proportion of the sample was not reported; White = 69%, Asian = 16%; Black = 9%, Mixed or other races = 6%).

The authors found that when individuals experienced emotional maltreatment during their teenage years, their brains exhibited increased neural responses when presented with threatening facial images. In contrast, maltreatment exposure during early childhood, especially witness violence and physical bullying, was associated with a different pattern of decreased neural response to threatening facial images. In sum, maltreatment occurring during adolescence compared to early childhood was associated with two opposing patterns of brain response to danger: increased versus decreased reactivity to threat.
