UK TRAUMA COUNCIL

Research Round Up

Q2 | 2021

Research highlights from the field of childhood trauma

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 from the field of trauma and childhood maltreatment published during the first quarter of 2021.

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 offense or harm. We are continuously discussing how to use language addressing race, ethnicity and gender when writing about research and are open to feedback to 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

Assessment of non-trauma symptoms in the context of trauma exposure

In this study, **Becker-Haimes and colleagues (2021)** investigated whether trauma exposure might bias clinicians' assessments of other non-traumatic symptoms (referred to as trauma-related diagnostic overshadowing bias). Mental health clinicians (n = 266; 82% female; age and ethnic information was not provided) were presented with clinical vignettes which depicted adolescents and pre-adolescents (of Hispanic or Black ethnic background) who were experiencing symptoms consistent with either a 'target' diagnosis of obsessive-compulsive disorder (OCD) or oppositional defiant disorder (ODD). The same clinical presentations were described in either the presence or absence of potentially traumatic events (physical or sexual abuse). Clinicians rated the likelihood that patients met the target diagnostic criteria and what treatment they would offer. Independent of the clinician's trauma-informed care level of training, they rated the main target diagnosis as less likely in the presence of traumatic events. Evidence-based treatment modalities for the target diagnosis were also rated as less appropriate. The under-diagnosing of OCD or ODD was amplified by the presence of sexual vs physical abuse. **In sum, this experimental study suggests that clinicians may be less likely to recognise symptoms as diagnostically relevant when young people report exposure to traumatic events.**

Becker-Haimes, E. M., Wislocki, K., DiDonato, S., Beidas, R. S., & Jensen-Doss, A. (2021). Youth trauma histories are associated with under-diagnosis and under-treatment of co-occurring youth psychiatric symptoms. *Journal of Clinical Child & Adolescent Psychology*, 1-12. doi.org/10.1080/15374416.2021.1923020

Interventions

Follow up study of treated and non-treated adolescents following exposure to a natural disaster

In this study, **Goenjian and colleagues (2021)** investigated the long-term mental health impact among young survivors of the Spitak earthquake which took place in 1988 (n = 142, 12-14 years old; 63% females; no ethnic information was provided). 18 months after the earthquake all participants were assessed for symptoms of post-traumatic stress disorder (PTSD) and depression. Moreover, a subgroup of 33 adolescents received a 6-week grief/trauma-focused individual and group intervention; the remaining 109 adolescents received no treatment. The researchers found that 25 years after the earthquake, those who originally met the criteria for a diagnosis of PTSD decreased significantly (more than 50%) across all participants. However, those who received treatment were experiencing significantly fewer symptoms of PTSD and depression as compared to those who had not received treatment. Other predictors of symptoms severity at 25 years follow-up included degree of home destruction, post-earthquake adversity (e.g. reduction in socio-economic status, access to food and electricity), the presence of a chronic medical illnesses and the quality of social support. **In sum, the results of this study suggest that following exposure to a natural disaster, trauma-focused treatment, alongside improvements in social and material conditions, can have a long-lasting positive impact on young people's mental health.**

Goenjian, A., Steinberg, A., Walling, D., Bishop, S., Karayan, I., & Pynoos, R. (2021). 25-year follow-up of treated and not-treated adolescents after the Spitak earthquake: Course and predictors of PTSD and depression. *Psychological Medicine*, 51(6), 976-988. doi.org/10.1017/s0033291719003891

Interventions

A review and meta-analysis of animal assisted interventions (AAI) for PTSD

Animal-assisted interventions (AAI) are structured and goal-oriented interventions that incorporate animals in treatment. A prominent form of AAI with people with PTSD is the integration of an animal into a manualized psychological intervention. In this paper, **Heidiger and colleagues (2021)** reviewed the existing literature on the effectiveness of AAI for children and adults with PTSD. The researchers included 41 studies. Participants' age across all studies was between four and 86 years (with 15 studies focusing on children and adolescents); 46% of all participants were female; information on ethnicity was not provided. Only eight studies had a control design (directly compared AAI with another intervention) and only two were randomised-control trials (participants were randomly assigned to receive either AAI or another intervention). Overall, the findings of this review suggest that AAI can lead to a substantial reduction in symptoms of PTSD and depression. AAI was found to be superior to receiving no treatment and was comparable to standard psychotherapy for PTSD. Future research is required to identify if there are individuals who may benefit from AAI but not from standard treatment. The authors also highlighted that the findings of the studies published to date should be considered as preliminary due to methodological challenges, such as lack of control interventions, low number of participants and the presence of baseline differences between individuals receiving AAI or a control intervention. **In sum, current research suggests that AAI may be a promising intervention for treating PTSD, but further research is required.**

Hediger, K., Wagner, J., Künzi, P., Haefeli, A., Theis, F., Grob, C., ... & Gerger, H. (2021). Effectiveness of animal-assisted interventions for children and adults with post-traumatic stress disorder symptoms: a systematic review and meta-analysis. *European Journal of Psychotraumatology*, 12(1), 1879713. doi: 10.1080/20008198.2021.1879713

Interventions

Assessment and treatment of PTSD in children 3-8 years old

In two separate studies, **Hitchcock and colleagues (2021)** examined the usefulness of the DMS-5 developmentally tailored diagnosis of PTSD for very young children (PTSD-YC) and the feasibility of an adapted cognitive-focused trauma therapy (CBT-3M). In the first study, 105 children (3-8 years old; 38% female; 85% of White/European origin) were assessed within one month and at three months after an emergency department visit. The researchers compared the adult acute stress disorder diagnosis (ASD; designed to aid the early identification of those at risk) with PTSD-YC. The prevalence, course, and demographic predictors of PTSD-YC were also explored. The adult ASD diagnosis failed to identify any young children with post-traumatic stress, while ~9% of young children met the clinical threshold for acute PTSD-YC in the first-month post-trauma and ~10% at three months. Early/acute PTSD-YC diagnosis predicted 50% of young children who at three months developed PTSD-YC. Also, the length of hospital stay (but no other demographics or trauma characteristics) were predictive of later emergence of PTSD-YC. In the second study, 37 children (3- 8 years old; ~50% female; information on ethnicity was not reported) took part in an early-phase trial assessing the feasibility and acceptability of CBT-3M. 18 received CBT-3M while 19 received standard treatment in the UK. Most children (~85%) who received CBT-3M did not meet the criteria for PTSD-YC post-treatment — compared to only ~7% for those who received standard treatment. **In sum, this study suggests that the adult acute stress disorder (ASD) diagnosis is not suitable for assessing acute distress post-trauma in very young children; it also provides initial evidence of acceptability and efficacy of a cognitive-focused treatment for PTSD in this age group.**

Hitchcock, C., Goodall, B., Wright, I. M., Boyle, A., Johnston, D., Dunning, D., ... & Dalgleish, T. (2021). The early course and treatment of posttraumatic stress disorder in very young children: diagnostic prevalence and predictors in hospital-attending children and a randomized controlled proof-of-concept trial of trauma-focused cognitive therapy, for 3-to 8-year-olds. *Journal of Child Psychology and Psychiatry.* Advanced online publication. doi: 10.1111/jcpp.13460

Interventions

Preventing the intergenerational transmission of adverse childhood experiences (ACEs)

In this review, **Narayan and colleagues (2021)** explore theoretical perspectives and empirical evidence on how to prevent the transmission of adverse childhood experiences (ACEs) from one generation to the next. The authors highlight that parental PTSD may play a significant role in the intergenerational transmission of ACEs, while parental protective factors (such as social support and opportunity for success) may buffer risk. The researchers also reviewed empirical evidence suggesting that not only negative, but also positive childhood experiences are transmitted across generations. These may counteract the risk of intergenerational transmission of ACEs. Specific demographic factors, such as age, gender, socioeconomic status and ethnicity were not systematically considered. The authors recommend the screening of ACEs and positive childhood experiences in both parents and children. They also suggest three key areas of intervention for reducing the intergenerational transmission of childhood trauma: (1) addressing parental PTSD, (2) providing treatments that focus on promoting positive early child-parent relationships, and (3) offering interventions and support during pregnancy. **In sum, this review suggests that inclusion of parental childhood experiences will be important for the development of future screening tools and interventions aimed at reducing the incidences of ACEs.**

Narayan, A. J., Lieberman, A. F., & Masten, A. S. (2021). Intergenerational transmission and prevention of adverse childhood experiences (ACEs). *Clinical Psychology Review*, 85, 101997. doi:10.1016/j.cpr.2021.101997

Impact of Trauma

The burden of childhood maltreatment and community violence

Estrada and colleagues (2021 explored the association between two types of early traumatic experiences (childhood maltreatment and exposure to community violence) with health, demographic, and psychosocial domains. The researchers used data from 28,300 individuals from 20 different samples – demographic variables, such as age, sex, income, and ethnicity were carefully considered in the analyses and presented for each sample (see Figure 2 in the published article). Individuals who had experienced childhood maltreatment were more likely to experience severe mental health problems and receive treatment for those. Community violence was more strongly associated with risk-taking and violent behaviours as well as neighbourhood-level disadvantage. Those individuals exposed to both high levels of community violence and maltreatment were more likely to experience stressful life events, as well as depression, anxiety and externalising behaviours (e.g., delinquency, aggression).

In sum, the findings of this study indicate that childhood maltreatment and exposure to community violence are associated with different mental health, behavioural, and psychosocial problems later in life.

Estrada, S., Gee, D., Bozic, I., Cinguina, M., Joormann, J., & Baskin-Sommers, A. (2021). Individual and environmental correlates of childhood maltreatment and exposure to community violence: Utilizing a latent profile and a multilevel meta-analytic approach. *Psychological Medicine*, 1-17. Advanced online publication. doi:10.1017/S0033291721001380

Impact of Trauma

Cognitive adaptations following exposure to caregiving instability

The cognitive processes required to monitor and flexibly select goal-directed behaviour, often referred to as cognitive or executive control, include the ability to inhibit automatic responses, sustaining or switching attention, and working memory. In this study, **Fields and colleagues (2021)** explored the association between caregiving instability (e.g. being placed in foster care) and three domains of executive control: (1) response inhibition, (2) attention control, and (3) cognitive flexibility. 275 children participated in this study (6-12 years old; 53% female; 27.6% Hispanic; 70.2% Non-Hispanic 70.2%, 2.2% other). The researchers found that caregiving instability was associated with poorer performance in response inhibition and attention control but was linked to better cognitive flexibility. **In sum, these findings suggests that adaptation to early caregiving instability may lead to both disruptions but also enhancement in different cognitive domains.**

Fields, A., Bloom, P. A., VanTieghem, M., Harmon, C., Choy, T., Camacho, N. L., ... & Tottenham, N. (2021). Adaptation in the face of adversity: Decrements and enhancements in children's cognitive control behavior following early caregiving instability. *Developmental Science*. Advanced online publication. doi: 10.1111/desc.13133

Impact of Trauma

Maternal experiences of early adversity impact mother-infant interactions

Current research suggests that mothers who were exposed to abuse and neglect during childhood (i.e., maternal childhood maltreatment) are more likely to experience poorer relationships with their children. This may contribute to the transgenerational transmission of maladaptive social and health outcomes. In this study, **Khouri and colleagues (2021)** used person-centred statistical models to explore the impact of different experiences of maternal childhood maltreatment on parenting behaviour in the first four months of life. 179 mothers (20 to 40 years old) and their infants took part in this study (4 months old; 53% female; 73.6% White, 16.3% other backgrounds, 10.6% Hispanic, 10.1% Black). The researchers found that a history of physical abuse and physical neglect were more strongly linked, respectively, with negative-intrusive maternal behaviour (e.g., harsh or critical verbal and non-verbal communication) and role-confused behaviours (e.g., soliciting the infant's attention or affection to the self in ways that override or ignore the infant's signals). Furthermore, experiencing multiple types of childhood maltreatment was associated with increased role confusion, withdrawal (e.g., leaning away from the infant, averting gaze), and fearful-disorientation (e.g., showing frightened facial expressions, frightened voices, tense body postures) in mother-infant interactions. **In sum, the findings suggests that different dimensions of maternal childhood maltreatment are associated with specific forms of mother-child interaction difficulties with babies as early as four months of age.**

Khoury, J. E., Dimitrov, L., Enlow, M. B., Haltigan, J. D., Bronfman, E., & Lyons-Ruth, K. (2021). Patterns of maternal childhood maltreatment and disrupted interaction between mothers and their 4-month-old infants. *Child Maltreatment*. Advanced online publication. doi:10.1177/10775595211007567

Impact of Trauma

The impact of complex trauma on future mental health and cognitive functions

Lewis and colleagues (2021 investigated how different early trauma profiles (complex, non-complex or no trauma) impacts subsequent mental health difficulties and cognitive functioning. Participants of this study were a population-representative (~51% female; ~91% White, ~9% non-White) longitudinal cohort of 2232 British children from the Environmental Risk (E-Risk) Longitudinal Twin Study. Pre-existing characteristics were assessed at 5 years of age and included the presence of internalising and externalising symptoms, IQ, family history of mental illness, socio-economic status, and sex. At 18 years of age, exposure to trauma, mental health problems, and current cognitive functioning were assessed. The researchers found that young people exposed to complex trauma experienced more severe mental health difficulties and poorer cognitive functioning compared to participants who experienced non-complex trauma or no trauma. Pre-existing vulnerabilities predicted an increased risk of experiencing complex trauma. While cognitive difficulties were explained by pre-existing childhood vulnerabilities, mental health difficulties were uniquely associated with exposure to complex trauma. **In sum, the findings of this study suggest that childhood complex trauma may lead to more severe future mental health difficulties than non-complex trauma.**

Lewis, S. J., Koenen, K. C., Ambler, A., Arseneault, L., Caspi, A., Fisher, H. L., ... & Danese, A. (2021). Unravelling the contribution of complex trauma to psychopathology and cognitive deficits: a cohort study. *The British Journal of Psychiatry*, 1-8. Advanced online publication. doi: 10.1192/bjp.2021.57

Impact of Trauma

Using ACES to predict future health outcomes at a group and individual level – a comment and reply on Baldwin et al. (2021)

Here we summarise a comment and reply about the **Baldwin and colleagues' (2021)** study that was presented in the **Research Roundup Q1|2021**. In the original research article, the researchers found that although ACEs were predictive of future mental health at a group level, they showed low accuracy when used to identify *individuals* at heighted risk. In their comment, **Machtinger and colleagues (2021)** argue that the consequences of trauma are influenced by an individual's ecosystem. They propose that to capture the impact of ACEs fully and sensitively at an individual level, a comprehensive person-centred assessment should include three domains: (1) early trauma exposure, (2) protective factors (resources and strengths), and (3) distress (both psychological and physical). **Baldwin & Danese (2021)** agree that including protective factors and distress alongside ACEs scores could improve individualised care planning. However, the researchers also highlighted that due to the low accuracy in predicting individuals at heightened risk for later health problems, interventions based on ACEs screening are likely to be ineffective. They might result in over-referral of individuals with high ACE scores who may not require support and under-referral of individuals with low ACE scores who will develop health problems. **In sum, both groups of researchers agree that further research is required to establish whether, and how, ACE scores can be used alongside other information to accurately screen for individuals at increased risk of poor health.**

Machtinger, E. L., Lieberman, A., & Lightfoot, M. (2021). Research, Practice, and Policy Implications of Adverse Childhood Events. *JAMA Pediatrics*. 175(8), 866-867. doi:10.1001/jamapediatrics.2021.0810

Baldwin, J. R., & Danese, A. (2021). Research, Practice, and Policy Implications of Adverse Childhood Events—Reply. *JAMA Pediatrics*. 175(8):867-868. doi:10.1001/jamapediatrics.2021.0813

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