

Exploring the impact of adverse childhood experiences on symptomatic and functional outcomes in adulthood: advances, limitations and considerations

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Exposure to traumatic experiences in childhood is a risk (and potentially causal) factor for the development of a range of adverse physical and mental health conditions. In addition to the onset of clinical disorders, there is emerging evidence that childhood trauma may also be associated with other long-term outcomes, such as the persistence and severity of an individual's symptoms, as well as their long-term social and occupational functioning. However, the reasons for this remain poorly understood. A greater understanding both of the mediators that drive these associations, and those variables that enhance resilience against such damaging experiences may help to inform effective therapeutic interventions. In addition to biological and cognitive measures, there is a need to consider social and environmental factors, such as parental bonding and attachment, when investigating these complex relationships.

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Trauma is a broad term in the research literature that encompasses exposure to a range of maladaptive experiences including neglect, and physical, emotional and sexual abuse. There is a growing consensus that exposure to traumatic experiences in childhood is a risk (and potentially causal) factor for the development of a range of adverse physical and mental health outcomes, including psychiatric disorders, obesity, self-injurious behaviour and addiction (Gilbert *et al.* 2009; Chen *et al.* 2010; Varese *et al.* 2012). In addition to the onset of these disorders, there is emerging evidence that childhood trauma may be associated with other long-term clinical outcomes, such as the persistence and severity of an individual's symptoms (Hovens *et al.* 2012). Recent studies have reported that trauma exposure is also a potential driver of functional problems, not only in childhood, but across the lifespan (Zielinski, 2009). This is evident even among individuals with emerging and full-threshold psychiatric disorders, indicating that exposure to traumatic experiences has enduring detrimental effects that go beyond clinical symptoms, affecting their wider social and occupational functioning (Cotter *et al.* 2015; Yung *et al.* 2015). However, the factors that mediate this association remain poorly understood. Greater awareness of these mediators and the variables that enhance resilience against such

damaging experiences may help to inform effective therapeutic interventions.

In this issue of the *Irish Journal of Psychological Medicine*, Marshall *et al.* (2018) report the findings of a study examining the relationships between trauma exposure and parental bonding in childhood with depressive symptoms and interpersonal functioning in adulthood among a sample of patients with bipolar and major depressive disorders. Consistent with previous research, high rates of exposure to traumatic experiences in childhood were reported among both of the diagnostic groups (74% and 82%, respectively). 'Affectionless control' was the most commonly reported parenting style (compared with 'optimal', 'affectionate constraint' and 'neglectful'). The authors reported that this parental style in conjunction with greater childhood trauma exposure was associated with significantly greater concurrent depressive symptoms and worse social functioning in adulthood among their patient group. However, only the 'affectionless control' variable remained as a significant independent predictor in multivariate analyses.

Though it was not formally assessed in this cohort, parental bonding represents both a potentially important mediating and moderating variable when exploring the relationship between trauma exposure in childhood and long-term clinical and functional outcomes. This is particularly relevant from an attachment perspective, given that exposure to maltreatment at the hands of caregivers is also likely associated with

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insecure attachment between the child and those individuals. Adverse attachment styles are thought to have negative implications for therapy among individuals with psychiatric disorders, impacting on therapeutic alliance, treatment adherence and engagement with clinical services (Gumley *et al.* 2014; Cotter *et al.* 2015). This may partially explain the association between trauma history and poorer symptomatic and functional outcomes observed in this and many other cohorts, given that individuals may be less willing to seek help, engage with therapy or take prescribed medication. In contrast, a safe and supportive family environment may help to buffer the impact of other childhood adversities, such as bullying or victimization at the hands of someone outside the family (Jaffee *et al.* 2017).

There is increasing evidence that routine evaluation of trauma history should be adopted for individuals presenting to mental healthcare services in order to identify those who may require more intensive monitoring and additional treatment. Despite studies suggesting that such assessment and treatment may confer benefits for a range of outcomes (Cotter *et al.* 2017), routine clinical inquiry about childhood maltreatment is frequently overlooked and inconsistently recorded across mental healthcare settings (Sampson & Read, 2017). Though clinicians may be reluctant to address this (due, e.g., to fear of symptom exacerbation), there are a number of tools available for the standardized assessment of childhood trauma, ranging from brief self-report screening questionnaires to detailed semi-structured interviews (for a review, see Thabrew *et al.* 2012). Recent research among patients with psychosis reported that trauma-focussed treatment did not result in symptom exacerbation or an increase in adverse events among those individuals randomized to receive the therapy relative to a group of waiting-list controls (van den Berg *et al.* 2016).

Trauma-focussed clinical interventions are available and have been shown to be effective in reducing post-traumatic stress disorder symptoms among people with serious mental illnesses (Mueser *et al.* 2015). However, it is also important to consider that childhood trauma may have a number of detrimental effects on individuals, impacting on brain development and cognition, interpersonal behaviour and clinical symptoms, potentially requiring a complex and individually tailored approach to treatment. In their article, Marshall *et al.* (2017) also cite the potential importance of preventative measures, such as therapeutic intervention aimed at sufferers of past abuse, neglect and poor parenting to prevent 'trans-generational patterns' continuing with their own children.

The study by Marshall *et al.* (2017) does however suffer from limitations which are typical of much of the

existing research in this area. They include a small sample and cross-sectional study design in which patients were asked to retrospectively self-report traumatic childhood experiences and their perception of being parented. The authors briefly refer to the issue of recall bias. It is also worth noting that 'effort after meaning' may have occurred, in which patients may attempt to understand why they became ill and so possibly recall more abuse and harsher parenting than those who are not ill. In addition, many individuals declined to participate and the most symptomatic individuals were excluded from the study. It is unclear whether these various biases would contradict or further support the results of the study. However, it is hard to see how these biases can be avoided in research about maltreatment and parenting, barring a large comprehensive prospective birth cohort study that focusses on these areas.

As Marshall *et al.* highlight, there is a need to routinely screen and treat those individuals who have experienced trauma, however, there also remain a number of poorly understood factors in the current research literature. For example, while many existing tools (such as the CTQ) provide a useful screening measure to assess the presence of childhood maltreatment, they do not permit detailed evaluation of specific aspects of trauma exposure. Factors such as the age at onset, as well as the frequency and distress associated with exposure to these traumatic experiences are not assessed. The toxic effect of childhood trauma is likely to be exacerbated by sustained and repeated abuse, yet the impact of adulthood revictimization has also been largely overlooked throughout the literature to date (Cotter *et al.* 2016). These are important considerations that may help to explain some of the individual differences observed in long-term symptomatic and functional outcomes among individuals who have experienced trauma. Evaluation of these issues may permit more detailed conclusions to be drawn on the impact of the timing and specific aspects of trauma exposure on the severity and persistence of adverse clinical outcomes.

In summary, there is a need for studies that seek to address the mechanistic relationship between childhood trauma and both long-term symptomatic and functional outcomes, through comprehensive investigation and sophisticated modelling of factors that potentially drive these associations. In addition to biological and cognitive measures, the paper by Marshall *et al.* (2017) highlights the need to consider social and environmental factors, such as parental bonding and attachment, when considering these complex relationships given their potential to serve both as important moderators and mediators of these associations. This in turn may have the potential to help inform effective therapeutic interventions.

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Conflicts of Interest

None.

Ethical Standards

The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committee on human experimentation with the Helsinki Declaration of 1975, as revised in 2008.

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