Childhood maltreatment increases suicide risk despite strong neuropsychological functioning

By Jessica K. Edwards

A cross-sectional and prospective study recently examined the independent effects of childhood maltreatment, neuropsychological functioning, and psychopathology, and their potential interactions with suicidal behaviour. Zelazny and colleagues recruited 382 offspring of depressed parents and conducted neuropsychological assessments at an average age of 18.5 years. Mood (43%), anxiety (37%) and alcohol and substance use (21%) disorders, as well as childhood maltreatment (44%) were prevalent in the cohort. From their analyses, childhood maltreatment consistently predicted a significantly increased risk of suicidal behaviours in both cross-sectional and prospective models. This risk persisted even in the presence of strong neuropsychological functioning. Conversely, language fluency was associated with protection against suicidal behaviour. Overall, a lifetime history of a mood disorder was the strongest predictor of suicidal behaviour: this effect was attenuated by high levels of working memory (OR = 0.21; 95% CI = 0.09, 0.45; p<.001) and executive function (OR = 0.15; 95% CI = 0.05, 0.43; p<.001). Better attentional performance was also protective against suicidal behaviour, but only among those with mood disorders without evidence of child maltreatment.

The researchers conclude that childhood maltreatment has long-lasting negative effects that might overwhelm the positive influence of any neuropsychological assets, on the risk for suicidal behaviour. They recommend that future studies should investigate whether assessments of executive function and working memory might aid clinicians in determining the most effective treatment for suicidal patients and whether improving executive function and working memory might lead to better treatment outcomes and decrease the risk of suicidal behaviour.