Three common mental health disorders show the greatest impact on mortality and disability in young adults: anxiety, depression and eating disorders. These conditions typically emerge in adolescence and tend to influence lifelong trajectories. Mindfulness is a promising approach for prevention across this group of disorders given its robust effects here in adults. However, enthusiasm for this approach in youth outstrips the current evidence base, which shows a paucity of well-controlled trials, none that have tested existing curricula independent of programme developers, and no theoretical or evidence based developmental models to inform adaptation of the successful adult mindfulness based interventions (MBIs).

The purpose of this research was therefore to expand on preliminary MBI research with youth in schools, providing independent tests of the effectiveness of an existing curriculum across a wider range of outcome factors, and investigating potential mediators that might inform active ingredients to emphasise for youth. Further, we tested whether early adolescence, a proposed key developmental window, was an effective time to teach MBIs.

We undertook two RCTs of an existing MBI for adolescents in schools ($N = 863$; M_{age} 13.5) with null results at post-intervention and 3-12 month follow-up across a wide range of outcome factors. Hypotheses for our lack of intervention effects included the younger age of our sample compared to similar trials, and content/format of current youth curricula modelled on adult MBIs. We report on the preliminary results (at post-intervention) from a third, small RCT ($N = 90$) testing an alternative mindfulness curriculum for youth with longer weekly sessions and more inquiry, and comparing its effectiveness across adolescent age bands (M_{age} 13.5-16.5).

We also present a series of five experiments adapting and validating a multifactor measure of mindfulness (CHIME-A) for use from early adolescence. This new measure enabled us to investigate the relationship between baseline levels of eight aspects of mindfulness and natural longitudinal trajectories of depression, anxiety and eating disorder risk factors in early adolescents ($N = 499$). We found a transdiagnostic protective effect related to three key facets of mindfulness (*Accepting and Nonjudgemental Orientation*, *Decentering and Nonreactivity*, and *Acting with Awareness*), although this effect reduced over time. Amplification of these components may improve effectiveness of current youth MBIs.

Drawing these findings together, we suggest that mindfulness curricula in secondary schools may not be universally robust in real-world settings independent of programme developers. We propose a range of future research options to investigate optimal content, format and age of delivery.