

Exploring Childhood Adversity, Aggression, and Self-Regulation:

A Mediation Analysis

Background

- Adverse childhood experiences (ACEs), which are potentially traumatic events during childhood, are linked with negative health outcomes (Felitti et al., 1998). This is especially true for low socioeconomic families (Suglia et al., 2022), but research is lacking.
- One of the negative health outcomes associated with childhood adversity is an increase in aggressive behaviour (Hostinar et al., 2023).
- Examining developmental mechanisms that help explain the connection between childhood adversity and negative health outcomes may help identify protective factors (Oh et al., 2018).
- Self-regulation is a potential protective factor that has gathered a considerable amount of interest in relation to aggression (Bounoua et al., 2022)

Results

- A mediation analysis was conducted using the PROCESS v4.2 macro (Hayes, 2022) in IBM SPSS Statistics (Version 28). The statistical significance of the indirect, direct, and total effects were evaluated using 95% confidence intervals, in which any interval that did not include 0 was deemed as statistically significant.
- There was a statistically significant indirect effect of adversity on aggression through self-regulation ($b = 0.08$, $SE = 0.03$, 95% CI [0.03, 0.14], $\beta = .12$).
- There was a statistically significant direct effect of adversity on aggression ($b = 0.20$, $SE = 0.06$, 95% CI [0.09, 0.31], $\beta = .30$). This was a decrease from the total effect of adversity on aggression ($b = 0.28$, $SE = 0.06$, 95% CI [0.16, 0.39], $\beta = .43$).
- Therefore, when controlling for age and sex, self-regulation partially mediated the relationship between adversity and aggression; it accounted for 29% of that relationship.

Objective

- This exploratory study aims to solidify our understanding of the association between childhood adversity and aggression by exploring the potential mediating role of self-regulation for children aged 6–18 months from low socioeconomic families.
- I predicted that self-regulation will partially mediate the relationship between childhood adversity and aggression due to the strong interactive links between adversity, aggression, and self-regulation in other types of participants that were described in the literature above.

Implications

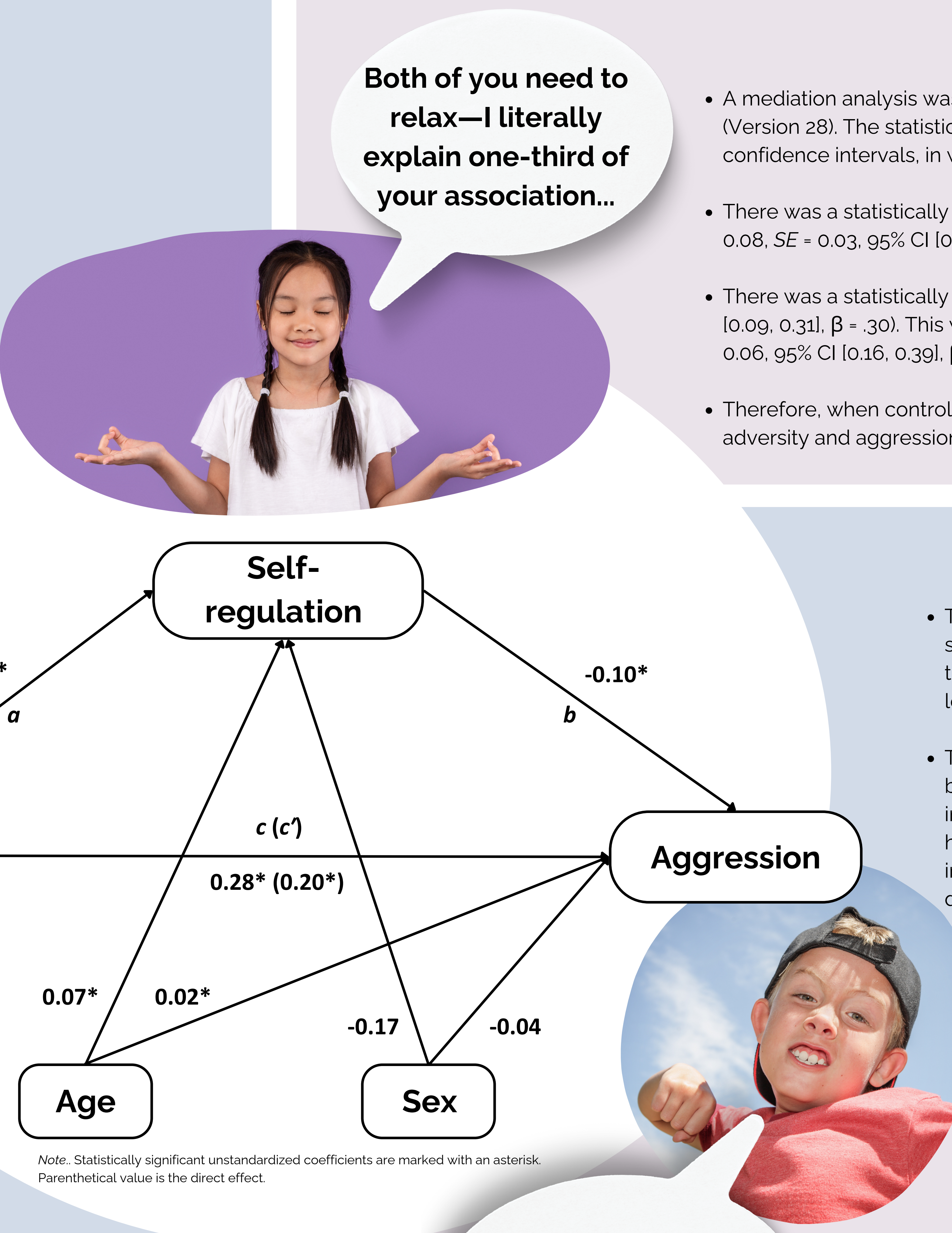
- The resounding 29% explanation of the association of adversity on aggression by self-regulation highlights the potential need for developing interventions that target self-regulation for children within schools, daycares, and residences within low socioeconomic neighborhoods.
- This change appears to be occurring at the biological level as well in terms of the brain's cortical thickness (Bounoua et al., 2022). However, promising findings involving brain plasticity and arts-based interventions (Sowden et al., 2015) give hope to these communities. A full-scale implementation of arts-based interventions that target self-regulation could be of great value for the development of these at-risk children.

Method

- There were 104 adult participants between the ages of 23–42 years ($M = 32.19$, $SD = 3.79$) who answered an online survey. The age range of their children was between 6–18 months ($M = 12.72$, $SD = 3.69$).
- Childhood adversity was measured using caregiver self-report on 12 items from Beck's Depression Inventory (BDI; Beck et al., 1961).
- Aggression was measured via caregiver report on 24 items from the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2000).
- Self-regulation was measured using caregiver report on three items from the Early Childhood Behavior Questionnaire (ECBQ; Putnam et al., 2014) relating to inhibitory control.
- Child age and sex were inputted as covariates.

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