State Emotion Regulation as a Mediator of the Relationship Between State Attachment Security and State Mindfulness

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Introduction

- Adult attachment theory. Adult attachment theory is a conceptual framework that describes the dynamics of one’s interactions in interpersonal relationships (Hazan and Shaver, 1987).
- Mindfulness is “paying attention in a particular way: on purpose, in the present moment, and non-judgmentally” and “the self-regulation of attention and the non-evaluative acceptance of one’s immediate experiences” (Kabat-Zinn, 1994, p.14).
- Emotion regulation refers to the ability to influence, experience, and express emotions in a manner that is conducive to one’s well-being (Gross, 1998).

- There is a large body of correlational research demonstrating a positive correlation between attachment security and mindfulness. However, there are no longitudinal studies and only two experimenter designed studies to date, with somewhat conflicting results (Stevenson, Emerson, & Mills, 2017).

- In a two-part study, it was found that priming state attachment security did not result in increases in state mindfulness and that priming state attachment anxiety did not result in decreases in state attachment security. However, indirect effects were not examined (Pepping et al., 2015). More recent research has found that priming state attachment anxiety predicts decreases in state mindfulness, via increases in state emotion regulation (Melen et al., 2016).

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The Present Study

- The present study attempts to add clarity to Pepping and colleagues’ (2015) study, with the addition of emotion regulation, which has previously been shown to be a mediator in the relationship between attention anxiety and mindfulness (Melen et al., 2016; Pepping et al., 2013).

- The present study build on Pepping and colleagues (2015) work by revisiting the relationship between attachment security and mindfulness and adding tests for indirect effects. The results from mediation analyses suggest that increased attachment security leads to increased mindfulness via increased emotion regulation, supporting hypotheses.

- Future studies should continue to test for indirect effects, specifically state emotion regulation which has shown to be a mediator of this relationship on multiple occasions. Future studies should also adopt a factorial measure of state mindfulness in order to gain a more complete understanding of the relationship between state attachment security, state emotion regulation and the different facets of state mindfulness.

Results

- Attachment security primes effect on mindfulness
  - When examining the total effect, changes in the FFMQ state scores supported hypotheses and revealed a significant indirect effect of the state attachment security prime on increased state mindfulness via increased state mindfulness regulation (β = .836, SE = .429, 95% CI[1.069, 1.56]). The direct effect was not significant, but was in the expected direction (β = .107, SE = .176, p = .080).

- Medication by emotion regulation
  - Medication analyses were carried out to test the indirect effect of increased attachment security on mindfulness controlling for baseline values of state emotion regulation and state mindfulness. Analyses on changes in FFMQ state scores supported hypotheses and revealed a significant indirect effect of the state attachment security prime on increased state mindfulness via increased state mindfulness regulation (β = .250, SE = .133, 95% CI[.093, .396]). The direct effect was not significant, but was in the expected direction (β = .460, SE = .691, p = .506).

Discussion

- The present study on the relationship between state attachment security and state mindfulness consists of incomplete and seemingly contradictory results (Melen et al., 2016; Pepping et al., 2015). In a two-part study, it was found that priming state attachment security did not result in increases in state mindfulness and that priming state attachment anxiety did not result in decreases in state attachment security. However indirect effects were not examined (Pepping et al., 2015). More recent research has found that priming state attachment anxiety predicts decreases in state mindfulness, via increases in state emotion regulation (Melen et al., 2016).

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Methods

- Participants registered on the online platform Amazon’s Mechanical Turk found and completed surveys on mindfulness, personality and resilience. Participants were compensated 2 dollars for their time.
- Participants complete a state attachment measure (the State Adult Attachment Measure, SAAM) created to measure state attachment security and anxiety (Adler & Mehlroth, 2013). The scale is composed of 30 items, broken into three sub-scales with each sub-scale with 10 items each measuring general, cognitive, and behavioral state attachment strategies. The total scale (α = .81), primary security (α = .79), anxious attachment (α = .76), and the secondary security (α = .77), anxious attachment (α = .76).
- Measures
  - State attachment security: The State Adult Attachment Measure (SAAM) was created to measure state attachment security and anxiety (Adler & Mehlroth, 2013). The scale is composed of 30 items, broken into three sub-scales with each sub-scale with 10 items each measuring general, cognitive, and behavioral state attachment strategies. The total scale (α = .81), primary security (α = .79), anxious attachment (α = .76), and the secondary security (α = .77).
  - Manipulation check
    - A manipulation check was done for experimental (n = 103) and control (n = 102) participants to measure the effect of the attachment security prime on the experimental group and the placebo task on the control group. The attachment security prime significantly increased state attachment security by condition (β = 3.007, SE = .863, 95% CI[2.37, 3.72], p = .0003).

- Procedure
  - Participants were randomly assigned to one of two conditions: experimental (priming state attachment security) and control (priming state mindfulness). Priming attachment anxiety reduces emotion regulation and mobilises self-control (Blumberg et al., 2015). Thus, participants were divided into experimental and control groups (Brammer, 2010).
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