Attachment and Mindfulness: A Systematic Review and Meta-analysis

Jodie Stevenson, Abigail Millings, & Lisa-Marie Emerson
jstevenson4@sheffield.ac.uk ; a.millings@Sheffield.ac.uk ; l.emerson@sheffield.ac.uk

Overview

- Background - why look at attachment and mindfulness?
- Systematic review - how the literature was gathered
- Meta-analysis - statistical analyses and results
- Conclusions - what does it all mean?
Background - Mindfulness

1. A particular state of awareness (Germer, Siegel, & Fulton, 2013)
2. A psychological trait (dispositional or trait mindfulness)
3. A contemplative practice (such as mindfulness meditation and mindfulness stress reduction techniques)
   - A distinctive state of consciousness compared typical cognitive processing:
     - sensory input is allowed and merely noticed rather than compared or evaluated or ruminated about (Brown, Ryan, & Creswell, 2007)
     - Deliberate self-regulation of attention and non-evaluative acceptance of one's immediate experiences (Kabat-Zinn, 1994)
     - Mindfulness cultivates understanding and insight to reality and provide a greater sense of compassion and kindness for oneself and others (Neff, 2012)

Positive benefits of mindfulness practice on mental, emotional, and physical health (Keng, Smoski, & Robins, 2011)

- Associated with reduced stress, lower emotional reactivity, increased well-being (Farb et al., 2010; Ortner et al., 2007; Carmody & Baer, 2008)
- Trait mindfulness is measured using the following five subscales - non-judging, non-reacting, act with awareness, observe, describe, (Baer et al., 2006)
- Researchers (understandably) want to know what predicts mindfulness, how it develops, ultimately in order to be able to promote/increase it
- Along with many other aspects of adaptive functioning, when considering the antecedents of mindfulness, researchers have highlighted the utility of a social context
- Specifically, attachment theory provides the most appropriate social conceptual framework (Shaver, Lavy, Saron, & Mikulincer, 2007)
Background - Attachment Theory

- Adult attachment style develops as a reflection of the sum total of experiences of being cared for in close relationships, and defines our strategies of affect regulation (Mikulincer & Shaver, 2007)
- Taking a social-cognitive/personality perspective, attachment style is measured on two dimensions of attachment insecurity: anxiety about abandonment and avoidance of intimacy (Brennan, Clark, & Shaver, 1998; Bartholomew & Horowitz, 1991)

Points of Contact between Attachment Theory & Mindfulness

- First identified by Ryan, Brown, and Creswell (2007), and subsequently expanded upon by Shaver et al. (2007)
- Both constructs share similar positive effects on a range of outcomes related to wellbeing (positive outcomes regarding mental and physical health, more successful relationships, adaptive coping, higher self-esteem, and increased self-regulation)
- Similarities between secure attachment experiences and Buddhist forms of mindfulness in terms of accessing mental representations of security:
  - Buddhist practice can involve accessing representations of acceptance by a loving Buddha, their teachings, and a community of fellow Buddhists, which is conceptually similar to attachment theory’s notions of secure base and safe haven provided by security-enhancing attachment figures (Shaver et al., 2007)
Points of Contact between Attachment Theory & Mindfulness

3. Incompatibility between insecurity (avoidance or anxiety) and effective mindfulness practice:
   - Mindfulness = open and accepting outlook with direct observations and a removed or decentered approach to thoughts and feelings
   - Attachment anxiety = feeling unworthy, hypervigilance, hypersensitivity to rejection, and rumination (Mikulincer & Florian, 1998)
   - Attachment avoidance = thought suppression, avoidance of feelings (Mikulincer & Shaver, 2003)

4. There may be a bidirectional relationship:
   - Security-enhancing relationship experiences are likely to increase a person’s capacity for mindfulness
   - Mindfulness meditation is likely to increase a person’s capacity for secure relationships

   Caveat: Current literature does not allow us to establish directionality!!

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**PRISMA diagram**

<table>
<thead>
<tr>
<th>Identification</th>
<th>Records identified through database searches (n = 10,239)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Records after duplicates removed (n = 10,168)</td>
</tr>
<tr>
<td>Screening</td>
<td>Records screened (n = 10,168)</td>
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<tr>
<td></td>
<td>Full-text articles assessed for eligibility (n = 39)</td>
</tr>
<tr>
<td>Eligibility</td>
<td>Records meeting eligibility (n = 31)</td>
</tr>
<tr>
<td>Included</td>
<td>Articles included in review (n = 31; with two articles incorporating multiple studies)</td>
</tr>
<tr>
<td></td>
<td>Studies included in review (n = 33)</td>
</tr>
</tbody>
</table>

Search terms: “Attachment” AND “Mindfulness”
Meta-analyses

- Attachment avoidance
- Attachment anxiety
- Total Mindfulness
  - Acting with awareness
  - Observing
  - Describing
  - Non-judging
  - Non-reacting

= 12 meta-analyses all together

Meta-analyses

- Conducted using STATA (version 12), based on random effects models
  - Assumes that the effect size of the relationship between the attachment and mindfulness variables in each of the studies varies as a function of differences in study characteristics as well as sampling error
  - Effect sizes were computed using Pearson’s r, SEs (calculated according to the specifications of Lipsey and Wilson, 2001) were used to weight each effect size
Sample-weighted average effect size of the relationship between adult attachment and mindfulness variables

<table>
<thead>
<tr>
<th>Relationship measured</th>
<th>$r_s$</th>
<th>k</th>
<th>n</th>
<th>95% CI</th>
<th>$X^2$</th>
<th>$I^2$</th>
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</thead>
<tbody>
<tr>
<td>Adult attachment anxiety</td>
<td>Total Mindfulness</td>
<td>-0.360***</td>
<td>22</td>
<td>5964</td>
<td>-0.40, -0.32</td>
<td>60.92***</td>
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<td>Act with awareness</td>
<td>-0.332***</td>
<td>12</td>
<td>5637</td>
<td>-0.38, -0.29</td>
<td>26.27**</td>
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<td>Observe</td>
<td>0.013</td>
<td>10</td>
<td>2279</td>
<td>-0.07, 0.10</td>
<td>37.95***</td>
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<td>Describe</td>
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<td>10</td>
<td>2279</td>
<td>-0.26, -0.08</td>
<td>42.86***</td>
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<td>2279</td>
<td>-0.51, -0.40</td>
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<td>Non-reacting</td>
<td>-0.258***</td>
<td>8</td>
<td>1542</td>
<td>-0.35, -0.16</td>
<td>25.90**</td>
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<tr>
<td>Adult attachment avoidance</td>
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<td>5844</td>
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<td>5637</td>
<td>-0.31, -0.20</td>
<td>42.60***</td>
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<td>-0.27, -0.05</td>
<td>33.83***</td>
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</tbody>
</table>

Note. CI = confidence interval, *$p < .05$, **$p < .01$. ***$p < .001$.

Conclusions

- Attachment insecurity on either dimension is associated with reduced capacity for mindfulness overall
  - This seems to be underpinned by reduced abilities for all subscales of mindfulness except Observing (where 2 studies found a positive correlation)
- The 3 biggest effects are for attachment anxiety and:
  - Non-judging
  - Total Mindfulness
  - Acting with Awareness
- Anxious individuals’ hypervigilience to threat, negative views of self, and emotional reactivity may account for these findings
Conclusions

- The 3 biggest effects for attachment avoidance were for the sub-dimensions:
  - Describing
  - Total Mindfulness
  - Non-judging
- Avoidant individuals’ deactivating affect regulation strategies, negative views of self, and emotional cut off may account for these findings

Conclusions

- The vast majority of the literature we found was cross sectional
  - More research needed to establish causality
  - Which develops first over time?
  - Does intervening to boost one also have positive effects on the other?
    - We had hoped to examine this but only found 2 studies that manipulated both constructs. One found no evidence of crossover, and the other only looked at the effect in one direction, and not neatly (for our purposes)!
  - Moderator analyses - stats indicated considerable variability in findings as a function of factors other than sampling error, but the studies are too heterogeneous to conduct meta-analyses looking at potential moderators (we need more research!)
Thanks for listening!

Questions?