

# The Relationship between Facets of Mindfulness and Implicit Racial Bias

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# Abstract

- While previous research has examined the effects of mindfulness interventions on implicit racial bias, the current study investigates the relationship between baseline levels of facets of mindfulness and implicit racial bias without a specific meditation intervention.
- It was predicted that higher baseline facets of mindfulness would be significantly correlated with lower levels of implicit racial bias.
- A significant negative correlation was found between higher levels of the Observing facet of mindfulness and implicit racial bias scores.
- These results offer insight into the possible mechanisms through which mindfulness meditation practice could be reducing implicit biases.

## Introduction

- Mindfulness meditation, which involves focusing one's awareness on the present moment without any self-judgment of passing thoughts or feelings, is associated with many physical and mental health benefits (Brown & Ryan, 2003; Keng, Smoski, & Robins, 2011).
- However, recent research suggests that the benefits of mindfulness may extend beyond individuals and into intergroup relations.
  - Specifically, there is a burgeoning collection of research providing evidence that mindfulness meditation practice may reduce implicit bias and discrimination (Clobert et al., 2014; Kang, Dovidio, & Gray, 2014; Lueke & Gibson, 2015/2016).
  - Additionally, Acceptance and Commitment Training (ACT), which utilizes mindfulness along with acceptance and values-based approaches, has also been shown to reduce stigma (Hayes et al., 2004) as well as increase positive behavioral intentions to reduce prejudice (Lillis & Hayes, 2007).
- Implicit racism has not only been pinned as a potential factor in cases of police brutality (Sim, Correl, & Sadler, 2013), but implicit biases in general are also likely to contribute to discrimination in many areas of society, such as through contributing to health disparities (Ibaraki & Hall, 2014; Sue et al. 2007) and influencing employer's hiring decisions (Ziegert & Hanges, 2005).
  - Gaining a better understanding of how we can potentially reduce implicit biases could have far-reaching positive societal effects.
- In addition to reducing implicit bias, mindfulness meditation practice has also been shown to increase trait-level facets of mindfulness (Carmody & Baer, 2008).
  - While previous research has examined the effects of mindfulness interventions on implicit bias, the relationship between baseline trait-levels of the facets of mindfulness and implicit bias has not yet been studied.

# **Hypothesis**

- Learning about the relationship between the facets of mindfulness and implicit bias could provide new insight about how and why mindfulness practice can reduce implicit bias.
- The current study investigates whether, without a specific meditation intervention, higher base-line levels of trait-mindfulness will be significantly related to lower levels of implicit racial bias.

## Method

#### Participants

• 92 Marist undergraduate students (71 female) ranging in age from 18-22.

#### Design & Materials

- Study materials included a trait-mindfulness questionnaire, a computerbased implicit association task, and a demographic questionnaire.
- Facets of mindfulness was measured via the Five Facet Mindfulness Questionnaire (FFMQ; Baer, Smith, Hopkins, Krietemeyer & Toney, 2006).
  - The FFMQ is a commonly used measure for trait-mindfulness composed of five subscales: Observing, Describing, Acting with Awareness, Nonjudging of Inner Experience, and Nonreactivity to Inner Experience.
- Implicit racial bias was measured via the Implicit Association Test (IAT; Greenwald et al.,1998).
  - The standard "race attitude" IAT, which assesses implicit attitudes toward "White Americans" versus "Black Americans," was installed onto study laptops; the standard version of the task was unaltered, except that the researchers modified the IAT so that participants did not receive feedback about their score upon completion of the task.

#### Procedure

• Following an oral informed consent process, participants, who were run in groups, completed the FFMQ, followed by the IAT, and finished with the demographic questionnaire.

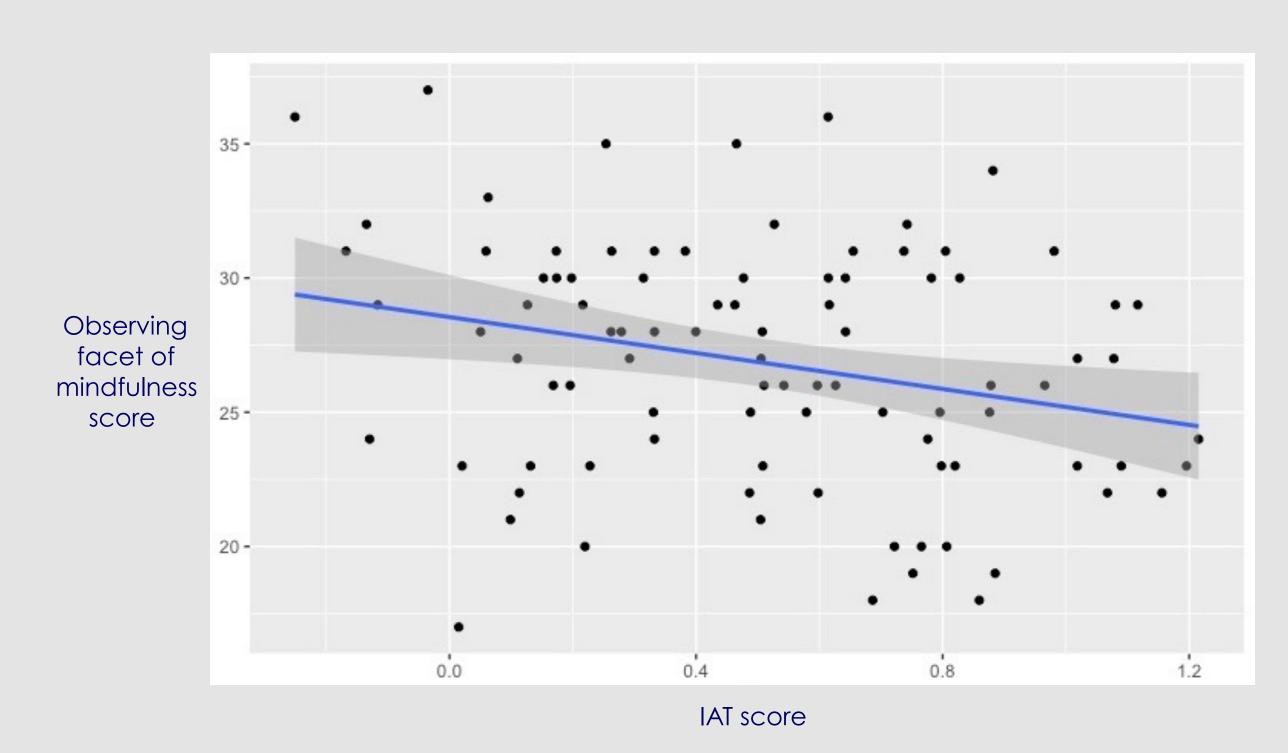


Figure 1. This scatterplot shows the negative linear relationship between Observing facet of mindfulness score and IAT scores, r = -0.268, p < .01,  $R^2 = .072$ .

#### Results

- Pearson correlations were calculated between each of the five FFMQ subscales and IAT scores.
- A significant negative linear correlation was found between Observing subscale scores and IAT scores, r = -0.268, p < .01.
  - No significant correlations were found between IAT score and the remaining four FFMQ subscales.
- A single linear regression model was then calculated to predict IAT based on Observing, F(1,90) = 6.946, p < .01, with  $R^2 = .072$ .

## Discussion

- Our results suggest that as levels of the Observing facet of mindfulness increase, levels of implicit racial bias decrease, and that levels of Observing can predict 7% of the variance in IAT scores.
  - These results clarify the hypothesis that higher base-line levels of facets of mindfulness would be significantly related to lower levels of implicit racial bias; it appears that while one the Observing facet of mindfulness is significantly related to levels of implicit bias toward Black American faces, the other four facets of mindfulness are not.
- Our results could offer a partial explanation for how or why mindfulness practice reduced implicit bias amongst participants in recent studies such as those by Clobert, Saroglou, Hwang, and Soong (2014), Kang, Dovidio, and Gray (2014), and Lueke and Gibson (2015, 2016).
  - Our results suggest that decreases in implicit bias found in previous research could have occurred, in part, because the practice of mindfulness in those studies increased levels of participants' Observing facet of mindfulness.
  - Replication of those studies with the inclusion of the FFMQ to measure changes in facets of mindfulness would allow us to test this new hypothesis, as well as allow us to rule out a third variable explanation for the results of the current study.
- Replication measuring other implicit biases in addition to racial bias would be beneficial, as well as replication with other measures of implicit bias, such as the Trust game task (Stanley et al., 2011) or the Implicit Relational Assessment Procedure (IRAP), would allow us to discern the extent of the generalizability of these results.
- That only the Observing facet of mindfulness was significantly related to implicit bias was interesting, and further research into the relationship between the facets of mindfulness and implicit bias is warranted.
- Gaining a better understanding of how mindfulness practice can reduce implicit bias has the potential to aid in the promotion of social equity and in reducing discrimination, and researching should continue to explore and clarify this relationship.

#### References

Baer, R. A., Hopkins, J., Krietemeyer, J., Smith, G. T., & Toney, L. (2006). Using Self-Report Assessment Methods to Explore Facets of Mindfulness. Assessment 13(1), 27-45.

Brown, K.W. & Ryan, R.M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. Journal of Personality and Social Psychology, 84, 822-848.

Carmody, J. & Baer, R.A. (2008). Relationships between mindfulness practice and levels of mindfulness, medical and psychological symptoms and well-being in a mindfulness-based stress reduction program. *Journal of Behavioral Medicine*, 31, 23–33.

Clobert, M., Saroglou, V., Hwang, K.-K., & Soong, W.-L. (2014). Eastern religious tolerance: A myth or a reality? Empirical investigations of religious prejudice in East Asian societies. *Journal of Cross-Cultural Psychology*, 45, 1515-1533.

Personality and Social Psychology, 74, 1464–1480.

Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The Implicit Association Test. Journal of

Hayes, S. C., Bissett, R., Roget, N., Padilla, M., Kohlenberg, B., Fisher, G., et al. (2004). The impact of acceptance and commitment training and multicultural training on the stigmatizing attitudes and professional burnout of substance abuse counselors. Behavior Therapy, 35, 821–835.

Ibaraki, A. Y. & Hall, G. C. N. (2014). The Components of cultural match in psychotherapy. Journal of Social and Clinical Psychology, 33(10), 936-953.

Kang, Y., Gray, J. R., & Dovidio, J. F. (2014). The nondiscriminating heart: Lovingkindness meditation training decreases implicit intergroup bias. Journal of Experimental Psychology: General, 143(3), 1306-1313.

Keng, S-L., Smoski, M.J., & Robins, C.J. (2011). Effects of mindfulness on psychological health: A review of empirical studies. Clinical Psychology Review, 31,

Lueke, A. & Gibson, B. (2014). Mindfulness Meditation Reduces Implicit Age and Race Bias. Social Psychological and Personality Science, 6(3), 284-291.

(2015). Mindfulness meditation reduces implicit age and race bias: The role of reduced automaticity of responding. Social Psychological Science, 6, 284-291.

(2016). Brief Mindfulness Meditation Reduces Discrimination. American Psychological Association, 3(1), 34-44.

Lillis, J., & Hayes, S. C. (2007). Applying acceptance, mindfulness, and values to the reduction of prejudice—A pilot study. Behavior Modification, 31, 389–411

Sim, J. J., Correll, J., & Sadler, M. S. (2013). Understanding police and expert performance: When training attenuates (vs. exacerbates) stereotypic bias in the decision to shoot. Personality and Social Psychology Bulletin, 39, 291–304.

Sue, D. W., Capodilupo, C. M., Torino, G. C., & Bucceri, J. M. (2007). Racial microaggressions in everyday life: Implications for clinical practice. American Psychologist, 62(4), 271-286.

Ziegert, J. C., & Hanges, P. J. (2005). Employment discrimination: The role of implicit attitudes, motivation, and a climate for racial bias. Journal of Applied Psychology, 90, 553–562.