

Brief Mindfulness Meditation Reduces Discrimination

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Recent research has demonstrated that mindfulness meditation reduces implicit race and age bias by weakening the associations of the target group with negative constructs. The current research examined the potential for mindfulness to also affect discriminatory behavior. Participants listened to either a 10-min mindfulness audio or a control audio before playing a game in which they interacted with partners of different races in a simulation and decided how much they trusted them with their money. Results indicated that the mindfulness condition exhibited significantly less discrimination in the Trust Game than did either of the 2 control conditions. The implications and importance of mindfulness meditation in alleviating bias are discussed.

Keywords: meditation, mindfulness, stereotypes, prejudice, discrimination

Our eyes are not only viewers, but also projectors that are running a second story over the picture we see in front of us all the time.

—Jim Carrey

This quotation conveys the idea that our evaluations of reality are rarely objective. We can be biased by expectations driven by automatic associations. These automatic associations can potentially impair our ability to see things as they are. Mindfulness meditation has recently emerged as a potential strategy to help individuals overcome these automatic associations. Recent research has suggested that mindful individuals show less automatic bias and are more psychologically flexible, which decreases strong negative emotional reactions (Fledderus, Bohlmeijer, Smit, & Westerhof, 2010; Lueke & Gibson, 2015; Ostafin & Kassman, 2012). Through mindfulness practice, individuals learn to cultivate awareness and view thoughts and feelings as transient mental events that are separate from the self, which inhibits the natural tendency toward automatic reaction and evaluation (Bishop et al., 2004).

The benefits of mindfulness meditation are potentially diverse, powerful, and far-reaching.

Research has illustrated a variety of benefits for those who practice it. For example, mindfulness has been used to help clinical populations with stress (Baer, Carmody, & Hunsinger, 2012; Kabat-Zinn et al., 1992; Miller, Fletcher, & Kabat-Zinn, 1995), pain (C. A. Brown & Jones, 2013; Kold, Hansen, Vedsted-Hansen, & Forman, 2012; Morone, Greco, & Weiner, 2008), and even physical healing (Davidson et al., 2003; Kabat-Zinn et al., 1998). Although this research has shown that benefits to meditative practice are varied and far-reaching, some increase in negative outcomes such as panic, depression, and anxiety has also been noted (Shapiro, 1992). More-recent research has begun to demonstrate the cognitive benefits of mindfulness as well (Ostafin & Kassman, 2012). Of particular relevance to the current research, religiosity centered around mindfulness practices has been shown to be related to universalism (Saroglou & Dupuis, 2006) and negatively related to explicit and implicit prejudice (Clobert, Saroglou, Hwang, & Soong, 2014). More recently, a direct mindfulness manipulation has been shown to reduce implicit bias, as measured by the implicit associations test (IAT), toward Black and elderly populations (Lueke & Gibson, 2015). The quad model (Conrey, Sherman, Gawronski, Hugenberg, & Groom, 2005) is a multinomial model that parses out the factors contributing to implicit bias, such as the automatic activation of stereotypes and the ability to overcome bias. Using the quad model, Lueke and Gibson (2015) showed that the reduction in implicit

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bias stemmed from a weakening of automatic associations between these groups and negative constructs. The current research examined the possibility that in addition to reducing implicit bias, mindfulness will also reduce discrimination.

Because the IAT has been shown to be a better predictor of many types of discriminatory behavior than are explicit attitudes (Greenwald, Poehlman, Uhlmann, & Banaji, 2009), it follows that the same mindfulness procedure that reduces implicit bias could also reduce discriminatory behavior. Specifically, implicit attitudes have been shown to be predictive of hiring practices (Ziegert & Hanges, 2005), willingness to shoot unarmed Black suspects in a simulation (Correll, Park, Judd, & Wittenbrink, 2002; Sim, Correll, & Sadler, 2013), and even nonverbal cues in simple conversational interactions (McConnell & Leibold, 2001). Particularly relevant to the current research, implicit attitudes have been shown to predict levels of trust toward Black and White interaction partners (Stanley, Sokol-Hessner, Banaji, & Phelps, 2011).

Despite the evidence that implicit attitudes can predict discrimination, a variety of factors can reduce the connection between implicit attitudes and behavior (Hofmann & Friese, 2008; Hofmann, Gschwendner, Castelli, & Schmitt, 2008; Ostafin, Bauer, & Myxter, 2012; see Greenwald et al., 2009, for a review). In addition, some have criticized the IAT, saying that it uses an arbitrary scoring metric and that individuals who display behavior that is neutral toward outgroups also tend to display negative implicit bias on the IAT (Blanton, Jaccard, Strauts, Mitchell, & Tetlock, 2015). For this reason, it is important to determine whether mindfulness can also result in reduced explicit discrimination.

To this end, previous research has shown reduced discrimination through mindfulness training that focused participants directly on the outgroup of interest (Djikic, Langer, & Stapleton, 2008; Langer, Bashner, & Chanowitz, 1985). Specifically, the mindfulness procedure prompted participants to think directly about the target of discrimination in various ways that made them think beyond the automatic stereotype of the target. In doing so, discrimination was reduced because participants directly imagined and categorized the target in more positive ways unrelated to the stereotype, so the stereo-

type itself would not be the basis for behavior. This mindfulness procedure requires active engagement with the concept of stereotypes in order to downplay their effect while concurrently focusing thoughts on other aspects of the stereotyped individual. In this same way, research has shown that being exposed to positive Black exemplars reduces negative implicit racial bias (Dasgupta & Greenwald, 2001). The positive associations provided by these exemplars begin to counterbalance the existing negative associations of the stereotype, leading to a reduction in the negativity of implicit attitudes.

In contrast, the more general and brief mindfulness procedure shown to reduce implicit bias involves attention to only the sensations being experienced in the moment. There is no active focus on overcoming automatic stereotypes. Instead, these negative implicit attitudes are reduced by weakening the associations between the target group and the negative constructs (Lueke & Gibson, 2015). Thus, we propose that a general mindfulness procedure will also reduce discrimination. In the current research we tested this hypothesis. If mindfulness can reduce discrimination without any direct focus on the stigmatized group, then its effectiveness as a tool of unification and equality would be more holistic and encompassing. To investigate this possibility, we assigned participants to mindfulness or control conditions before performing a trust discrimination measure (Stanley et al., 2011). Specifically, we hypothesized that mindfulness would cause participants to give similarly to Black and White interaction partners in the trust discrimination measure, whereas both control conditions would give more to White than Black interaction partners.

Method

Participants

Participants were 124 White undergraduate psychology students (46 men) of traditional college age who received course credit for their participation. Participants were randomly assigned to one of the three between-subjects conditions using a random number generator. The design was a 3 (pure control, control attention, mindfulness) \times 2 (rating Black and White faces) mixed factorial design. The mindfulness manipulation was a between-subjects factor,

and the face rating was a within-subject factor. Data from 26 participants were eliminated due to evidence that they used a rule-based strategy during the Trust Game (e.g., giving \$10 to every interaction partner). The proportion of individuals eliminated on this basis (23%) is similar to that in previous research using this game (25%; Stanley et al., 2011). In addition, five participants were eliminated for failing to follow directions (e.g., skipping the audio instruction), leaving 93 participants in the sample. Finally, we evaluated the sample for outliers using the median absolute deviation technique (see Leys, Ley, Klein, Bernard, & Licata, 2013). Using the suggested moderately conservative judgment rule, we discarded data from six participants due to the extreme nature of their responses in the Trust Game. The participants eliminated on this basis were all over 2 standard deviations from the mean, and no participants who were over 2 standard deviations from the mean remained in the sample.¹

Study Measures

Trait mindfulness. Trait mindfulness questions were taken from the Freiburg Mindfulness Inventory (FMI; Buchheld, Grossman, & Walach, 2001), the Mindfulness Questionnaire (Chadwick, Hember, Mead, Lilley, & Dagnan, 2005), and the Kentucky Inventory of Mindfulness Skills (Baer, Smith, & Allen, 2004). Baer, Smith, Hopkins, Krietemeyer, and Toney (2006) identified these as central trait mindfulness dimension subscales: Non-Reactivity (seven items; $\alpha = .35$) and Observing (15 items; $\alpha = .83$). The Mindfulness Attention Awareness Scale (15 items; $\alpha = .85$; K. W. Brown & Ryan, 2003) was also utilized for a total of 37 items. We used only the Non-Reactivity and Observing subscales from Baer et al. (2006) because they are the most in line with the factors of mindfulness measured in the two state mindfulness questionnaires. Representative questions included “Usually when I have distressing thoughts or images, I just notice them and let them go” and “When I’m walking, I deliberately notice the sensations of my body moving.” Internal consistency for the 37 trait mindfulness questions together was good ($\alpha = .83$).

State mindfulness. State mindfulness was measured through two scales: the Toronto

Mindfulness Scale (TMS; Lau et al., 2006) and the State Mindfulness Scale (SMS; Tanay & Bernstein, 2013). Both of these contain items that are similar to those in the trait mindfulness scales but are framed to reflect a more current state of mind. Both scales ask participants to indicate how much they agree with several statements regarding their experience during the audiotape manipulation on a 5-point scale. Examples of each scale, respectively, include “I experienced my thoughts more as events in my mind than as a necessarily accurate reflection of the way things ‘really’ are” and “I noticed physical sensations come and go.” Internal consistency for the 13 items in the TMS ($\alpha = .87$) and 21 items in the SMS ($\alpha = .89$) were both very good.²

Trust game. Discrimination was measured with a modified Trust Game task (Stanley et al., 2011). All participants began with 50 theoretical dollars and were told that the goal of the game was to accrue as much money as possible by the end of the game. Participants were told that the individual with the highest dollar total at the end of the game would win 20 actual dollars. They were told that they would be interacting with various people who had previously volunteered to be part of this game and whose responses were already recorded. Participants encountered 150 pictures of interaction partners who varied in ethnicity, one at a time, with presentation order randomly determined for each participant. Each picture was of a real human face, and the total of 150 faces consisted of 50 White faces, 50 Black faces, and 50 faces

¹ Of the six eliminated outliers, four were from the control attention condition. Inclusion of these four outliers only slightly reduced the effect on the Trust Game ($p = .14$). However, inclusion of the outlier from either the pure control condition ($p = .10$) or the mindfulness condition ($p = .12$) single-handedly reduced the Trust Game effect by roughly the same amount. All outliers were so extremely far away from the mean ($M = 22.02$; range of outliers’ distance from the mean = 120–187; distance of the closest outlier from the most extreme included data point on each side of the distribution = 29; 25) that it fully justified their removal with the median absolute deviation method.

² Explicit racial attitudes were also measured with the eight-item Symbolic Racism Scale (SRS; Henry & Sears, 2002). However, internal consistency of the scale items was poor ($\alpha = .25$). This may have been due to altering some of the questions on the scale to produce more response options. Therefore, we did not continue with the planned analysis of the effect of mindfulness on explicit racial attitudes.

of either Asian or Middle Eastern descent. The faces were chosen from the sample used in previous research (Stanley et al., 2011), which were selected from several databases, including Karolinska Directed Emotional Faces (Lundqvist, Flykt, & Ohman, 1998), the Eberhardt Laboratory Face Database, the Color Facial Recognition Technology Database from the National Institute of Standards and Technology, and the NimStim Face Stimulus Set (Tottenham, Borscheid, Ellertsen, Marcus, & Nelson, 2002). For each interaction partner, participants decided how much money they were willing to risk giving to the individual (\$0–\$10), knowing that the individual would receive quadruple the amount given. Furthermore, participants were told that each interaction partner had already decided to either give the participant half of the quadrupled money back or keep all of it for themselves. Participants did not know whether they gained or lost money after each trial but were told that if their money total reached \$0, then the game would end and they would be automatically disqualified. In actuality, there were no gains or losses to the initial \$50.

Procedure

Participants were tested one to three at a time, sitting at private workstations with computers equipped with the MediaLab software (Jarvis, 2014) and a set of headphones. When they were ready, participants were given the trait mindfulness questions to control for potential differences between conditions on trait mindfulness before the manipulation.

Following completion of these scales, individuals were randomly assigned to either a mindfulness or control recording that had been used in previous research (Cropley, Ussher, & Charitou, 2007). Participants in the mindfulness condition listened to a 10-min audiotape that instructed them to focus and become aware of sensations in the body (such as the heart beating or breathing) while fully accepting any bodily sensations and thoughts without reservation. The pure control condition listened to a 10-min audiotape describing an English countryside. The control attention condition listened to the same audiotape as did the pure control condition, but they were also told to pay attention for the word *parish* and make a check mark on a piece of paper when they heard it, in addition to

being told that they would be tested on the material in the audiotape at the end of the study. This control attention condition was included to ensure that it was not the mere act of engaging in focused attention that causes mindfulness to produce its effects but rather is due to the mindfulness content itself. In this way, we could control for individuals in the pure control condition who might let their mind wander, as opposed to those in the mindfulness condition, who likely stayed present in awareness (Mrazek, Franklin, Phillips, Baird, & Schooler, 2013). Once the 10-min audiotape was finished, participants moved on to complete state mindfulness scales.

As a manipulation check, state mindfulness was measured immediately after the audiotape. Once finished, participants completed the modified Trust Game task. This task measures implicit evaluations of trustworthiness and has been shown to be significantly correlated with implicit racial attitudes (Stanley et al., 2011). At the conclusion of this task, participants answered questions regarding explicit racial attitudes (which was excluded from the current analyses due to low reliability) before being asked general demographic questions, including a question regarding awareness of the purpose of the study. This awareness question asked participants to surmise the purpose of the study in one or two sentences if they could. Then, participants were debriefed and told to give their contact information to be entered into a drawing for \$20 before being thanked and allowed to leave.

Results

Preliminary Analyses

Several univariate analyses of variance (ANOVAs) were used to ensure no significant differences existed between conditions in terms of the three dimensions of trait mindfulness prior to the manipulation. Results indicated no significant difference between conditions in terms of trait Non Reactivity mindfulness, $F(2, 84) = 0.49, p = .62$; trait Observing mindfulness, $F(2, 84) = 0.48, p = .62$; trait mindfulness as measured by the Mindfulness Attention Awareness Scale, $F(2, 84) = 0.15, p = .86$, or the total mindfulness scale, $F(2, 84) = 0.01, p = .99$ (see Table 1). In response to the aware-

Table 1

Means (and Standard Deviations) of the Trait Mindfulness Scales and Their Combined Output, as Well as State Mindfulness Based on the TMS and SMS

Condition	Trait mindfulness				Toronto Mindfulness Scale (TMS)	State Mindfulness Scale (SMS)
	Non-Reactivity	Observing	Mindfulness Attention Awareness Scale	Total		
Pure control	26.18 (4.75)	44.75 (7.46)	54.68 (11.46)	125.61 (17.77)	36.21 (8.56) ^a	55.75 (11.87) ^a
Attention control	26.10 (3.28)	43.55 (11.70)	56.17 (10.14)	125.83 (18.41)	34.52 (7.60) ^a	57.07 (10.31) ^a
Mindfulness	25.20 (4.55)	45.97 (8.64)	55.17 (9.74)	126.33 (14.12)	40.50 (9.47) ^b	69.53 (15.21) ^b

Note. Means in the same column that do not share superscripts are significantly different from each other ($p < .01$), except for the difference between the mindfulness and pure control conditions on the Toronto Mindfulness Scale, which was marginally significant ($p = .06$).

ness of the study's purpose question, no participant accurately responded that the purpose of the study was to reduce discrimination or that mindfulness had anything to do with the Trust Game.

Manipulation Checks

For the Toronto Mindfulness Scale, a significant difference existed, $F(2, 84) = 3.81$, $p = .03$, $\eta_p^2 = .08$, with the mindfulness condition significantly higher than the control with attention condition ($p = .009$) and marginally significantly higher than the pure control condition ($p = .06$; see Table 1). Control conditions were not significantly different from each other ($p = .46$). Planned contrasts revealed that the mindfulness condition was significantly more mindful on the total Toronto Mindfulness Scale than were the combined control conditions, $t(84) = 2.65$, $p = .005$.

For the State Mindfulness Scale, there was a significant difference between the conditions, $F(2, 84) = 10.60$, $p < .001$, $\eta_p^2 = .20$, with the mindfulness condition exhibiting significantly higher state mindfulness than did both the control with attention condition ($p < .001$) and the pure control condition ($p < .001$; see Table 1). Control conditions were not significantly different from each other ($p = .70$). Taken together, results suggest that the mindfulness manipulation was successful.

Primary Analyses

A 3 (mindfulness vs. pure control vs. control attention) \times 2 (ratings of Black vs. White faces) mixed measures ANOVA revealed a significant

main effect for race, $F(1, 84) = 26.23$, $p < .001$, $\eta_p^2 = .24$, indicating that participants gave more money overall in the Trust Game to White interaction partners ($M = 262.36$, $SE = 8.54$) than to Black interaction partners ($M = 238.64$, $SE = 8.87$), regardless of audio condition. There was not a significant main effect for audio condition in terms of the total amount given to interaction partners, $F(2, 84) = 1.57$, $p = .22$, $\eta_p^2 = .04$. There was a significant interaction between race and audio condition, $F(2, 84) = 3.38$, $p < .04$, $\eta_p^2 = .07$, however. To explore this effect, we combined the difference between the amount given to Black and White interaction partners into one value, with positive numbers indicating a greater amount of money given to White participants than Black participants over the course of the entire Trust Game (50 trials for each race). Post hoc least significant difference tests revealed that the mindfulness condition was significantly less biased than was the pure control condition ($p = .04$) and the control attention condition ($p = .02$; see Figure 1). The two control conditions were not significantly different from each other ($p = .81$). Planned contrasts further validated that the mindfulness condition was less biased than were the combined control conditions, $t(84) = 2.59$, $p = .006$.

Overall, the mindfulness condition showed significantly less bias on the Trust Game than did either of the two control conditions. In order to investigate whether mindfulness had its effect on reduced discrimination on the Trust Game through scores on the state mindfulness scales, we examined correlations between each of the state mindfulness scales and Trust Game

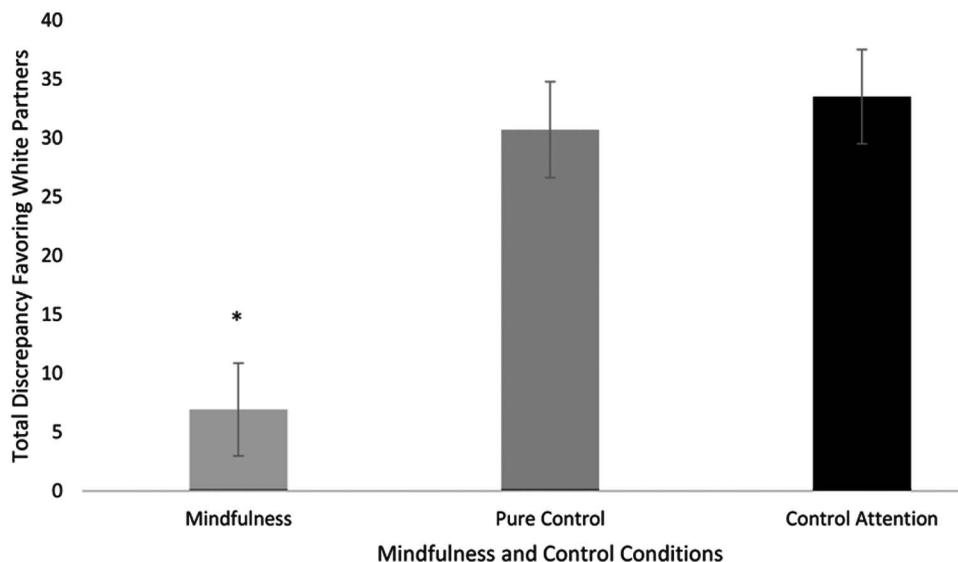


Figure 1. Total amount given more to White interaction partners than Black interaction partners. Error bars indicate the standard error of the means. * $p < .05$.

scores. Results indicated that there were no significant correlations between any of the state mindfulness scales (or subscales) with prejudiced behavior on the Trust Game (all $r_s < .11$, all $p_s > .16$). Because there were no correlations, meditational analyses were not utilized.

Discussion

Participants who listened to a 10-min audiotape that focused them on their sensations and thoughts in a nonjudgmental way were less biased than were control participants in their evaluation of trustworthiness of White and Black individuals in the Trust Game. Consequently, they “trusted” White and Black individuals almost identically, giving members of both groups roughly the same amount of money, believing these individuals would not take it all and would instead return the favor. Conversely, participants in both control conditions trusted White individuals significantly more in the game, giving them more money than their Black counterparts. Overall, participants in the control conditions gave White individuals 14% more than Black individuals, whereas participants in the mindfulness condition gave only 3% more to White individuals. This suggests that mindfulness can quickly open the individual up to

allowing the same benefit of the doubt to Black strangers as to White strangers while creating a more-objective interaction that moves past such simple biases.

It is important to note that trait mindfulness was not significantly different among conditions before any manipulation took place. However, after the audiotape manipulation, participants in the mindfulness condition showed significantly higher state mindfulness scores than did those in either of the control conditions. Furthermore, it took only 10 min of meditation from novice participants to achieve these effects. It seems possible that discrimination would be even more fully reduced and potentially consistently nonexistent in regular mindfulness practitioners, even if they have not recently meditated. It is important to continue this line of research to determine how effective meditation can be in the long term, how long these effects actually last, and how extensive the cultivation of equality through mindfulness can be. Long-term practitioners are not only more familiar with the state of being mindful but also are able to delve more deeply into their meditative practice. This could lead to a sustained state of mindfulness that dissipates very slowly with time, if at all. To this point, recent research has indicated that long-term practitio-

ners require less effort to enter and maintain a mindful attentional state than do individuals with much less meditation experience, as if long-term practitioners had mastered a skill that short-term practitioners were still attempting to master (Brefczynski-Lewis, Lutz, Schaefer, Levinson, & Davidson, 2007)

Furthermore, the general mindfulness experience used in our study reduced discrimination without focus on a stereotyped target. In other words, unlike in past research on mindful reduction of discrimination, participants did not have to actively think about the negative stereotype directly in order to overcome its effect. Individuals were given no indication that the experiment focused on racial prejudice or discrimination. It is possible that the reduced discrimination exhibited in the mindfulness condition was the result of reduced implicit racial bias, which has been shown to decline after mindfulness training (Lueke & Gibson, 2015). The distinction is important, because it indicates the ability of general mindfulness to eliminate bias before the moment arises in which one is provided an opportunity to express it, as opposed to attending to the bias in the moment in order to overcome it, which may diminish or distract cognitive resources that could be used for other tasks. In order to ensure that participants were not primed with the idea of race or did not discover the focus of the experiment, we chose not to have them complete the race IAT before the Trust Game. Though this would have allowed us to statistically examine whether implicit attitudes mediated the relationship between mindfulness and discrimination, it likely would have altered behavior in the Trust Game by making participants focus on race. However, given the literature demonstrating the role of implicit attitudes on discrimination (Correll et al., 2002; McConnell & Leibold, 2001; Sim et al., 2013; Ziegert & Hanges, 2005) and the finding that implicit attitudes are correlated with discrimination on the Trust Game (Stanley et al., 2011), it seems possible that a reduction in implicit bias is the mechanism by which a general mindfulness procedure reduced discrimination.

Another form of meditation, lovingkindness meditation, has also been shown to reduce implicit bias against the homeless on the IAT (Kang, Gray, & Dovidio, 2014). However, the results indicated that it was the reduced stress

that came with meditation that mediated the relationship with implicit bias. Thus, meditation reduced stress, which then reduced negative implicit attitudes toward the homeless. In contrast, Lueke and Gibson (2015) found that a 10-min mindfulness meditation reduced age and race implicit bias through reduced activation of automatic associations as measured by the quad model (Conrey et al., 2005).

Mindfulness, however, has also been well established as an effective stress-reducing practice (Baer et al., 2012; Kabat-Zinn et al., 1992; Miller et al., 1995). Therefore, it is possible that the reduced stress brought about by mindfulness could also reduce automatic stereotype activation, contributing to the reduction in discrimination. Because stress has been implicated in increasing the use of cognitive biases such as heuristics (Schaeffer, 1989; Shaham, Singer, & Schaeffer, 1992), stereotyping (Baron, Inman, Kao, & Logan, 1992; Friedland, Keinan, & Tytun, 1999), and implicit bias (Frantz, Cuddy, Burnett, Ray, & Hart, 2004; Terbeck et al., 2012), it is possible that mindful stress reduction could also contribute to reduced discrimination. Future research could attempt to evaluate the role of reduced stress, reduced automaticity of implicit bias, and reduced explicit bias as potential mediators of reduced discrimination.

Although the nature of the results is compelling, there are a number of other issues that could be addressed in future research. First and foremost, a more direct link that clearly indicates that it is the reduction in implicit bias through mindfulness that causes reduced discrimination would be an important addition to the current research. We were concerned that administering a race IAT before the Trust Game task would have made participants more aware of the purpose of the study after taking the IAT, which could have affected discrimination scores on the Trust Game. To address these issues, future research should employ more surreptitious measures of implicit bias and discrimination in order to identify the link between mindfulness, implicit bias, and discrimination without alerting the participants to the purpose of the study. In addition, future research should also perhaps use a stronger mindfulness manipulation, such as an 8-week mindfulness-based stress-reduction class. Given the length of the overall program, this may allow for the inclu-

sion of the IAT and Trust Games at different times near the end of the course, in addition to distraction measures, which would blanket the purpose of the study and not make it readily apparent to participants. Furthermore, although this brief mindfulness manipulation significantly increased state mindfulness and reduced discrimination in the Trust Game, the state mindfulness scores did not correlate with Trust Game scores. Thus, formal mediation was not tested in the current study and requires further examination. The current study focused on two dimensions of state mindfulness (Non Reactivity and Observing), although there are more. It is possible that by including all of the dimensions of mindfulness meditation, mediation could be identified. On the other hand, perhaps the current state mindfulness scales are either not sensitive enough or do not measure an aspect of mindfulness that is integral in promoting equality. Future research should attempt to discover what exactly it is about mindfulness that reduces discrimination. In addition, given the Trust Game has a tendency to produce repetitive and inappropriate responses among some participants, which led to a considerable amount of participant data that needed to be removed in the current study and in previous research (Stanley et al., 2011) another measure of discrimination should be utilized in the future to circumvent this issue and include a greater proportion of participant data.

Finally, it is unclear exactly why the SRS showed such poor internal consistency. Perhaps altering certain questions to include more response options changed the nature of the scale's reliability. Alternatively, it is possible that the Trust Game highlighted the aspect of race for participants, which consequently altered their responses on the SRS. Furthermore, although the brief mindfulness manipulation has been strong enough to reduce implicit bias and a behavioral measure of discrimination, it may not be strong enough to alter more deeply entrenched explicit attitudes as does consistent practice (Clobert et al., 2014). Future research should attempt to address these issues.

The current research provides evidence that meditation can help reduce prejudice and discrimination. Overall, the results indicate that mindfulness fosters a greater sense of equality, in which members of a stereotyped outgroup are treated more fairly. Although the current cul-

tural climate is one of acceptance of others of all types, the change brought about by this ideal is slow-moving, often not reaching or affecting certain people. Furthermore, due to other factors, such as the normalcy of the association of being Black with violence (Bargh, Chen, & Burrows, 1996; Payne, 2005; Payne, Lambert, & Jacoby, 2002), even people who believe in these values often behave in subtly prejudiced ways. Mindfulness may have the potential to hasten the unification of people in ways that extend beyond any culturally approved credo. Through extended practice, mindfulness can possibly bring us closer to each other in a more profound way, a way in which we see each other truly and as possessing the same innate qualities and essence that we ourselves possess. If this occurs, we can potentially improve race relations and thus better focus our energy and efforts on an enduring state of human relations.

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