Abstract:
Researchers have demonstrated that unconscious prejudices around characteristics such as race, gender, and class are common, even among people who avow themselves unbiased. The authors present a method for teaching about implicit racial bias using online Implicit Association Tests. The authors do not claim that their method rids students of biases. Instead, the authors show that this approach helps students recognize that they and many other people may hold implicit biases that can affect perceptions and actions and realize that prejudice is not reducible to overt bigotry. The authors also show that the exercise helped some students recognize that talking about race and challenging unconscious associations are better methods of combating prejudice than simply pretending not to notice race. Qualitative and quantitative data reveal that the approach described here was effective in building students’ understanding of unconscious prejudice.
In 2010, Harvard University professor Henry Louis Gates, who is African American, was arrested after a white neighbor who saw him trying to enter his own house by forcing the door open called the police. Gates argued that he was wrongly labeled a criminal because of the assumption that an African American man did not belong in a wealthy neighborhood. When Gates berated the officer called to the scene for this mistake, he was arrested for disorderly conduct. In the wake of the incident, at least one commentator suggested that the incident did not involve racism because the officer had once given cardiopulmonary resuscitation to an African American (Buchanan 2009).

Why did Gates’s neighbor see him as a potential criminal? Furthermore, why was the fact that the arresting officer had once saved an African American’s life seen as evidence that Gates’s treatment had nothing to do with race? The media’s turn to the arresting officer’s past lifesaving behavior toward an African American man, and their focus on the lack of overt bigotry by the neighbor or the officer, displaced consideration of whether

the neighbor and the officer had been more ready to assume the worst because of Gates’s race. The framework most students use to understand racism—in which racism is seen as open, personal, intentional, and largely synonymous with bigotry—cannot fully explain this and other important instances. Instead, the concept of unconscious prejudice, which may clash with a person’s consciously avowed beliefs, offers insight that the more widely held bigotry perspective does not.

There is a growing wealth of research on the significance of unconscious associations and biases, and antiracism workshops outside of
college classrooms have sought to educate participants about unconscious prejudice. Simultaneously, many articles on pedagogy have addressed different aspects of teaching about racism and prejudice. However, we know of only one academic article that addresses how to teach about unconscious prejudice (Bordt 2004). Because students often do not recognize that “good people” can unintentionally produce social harm and frequently understand “isms” such as racism and sexism to describe only overt and deliberate actions (Kleinman and Copp 2009), it is important for educators to continue to develop ways to show students that unconscious prejudices may shape thoughts and behaviors even of people who consider themselves unbigoted. In this article, we present an approach to teaching about this topic. Although we use this exercise in discussing race, with slight variations, it can also be used in addressing other areas in which prejudice and discrimination are involved.

In the following sections, we review the research literature on unconscious associations and biases. We then focus on unconscious prejudices involving race and their connection to what Bonilla-Silva (2006) termed “color-blind racism.” We argue that introducing the concept of unconscious prejudice as we do helps students understand that bias is not reducible to overt bigotry. We describe our method of teaching about unconscious associations using the Race Implicit Association Test (IAT; Greenwald, McGhee and Schwartz 1998), which measures test takers’ reaction speed when asked to group images of white or African American faces with positive or negative adjectives. Finally, we present evidence that our method improved students’ understanding of unconscious prejudice, challenged their understanding of themselves as free of biases, and helped some students begin to identify steps to take in combating their own unconscious prejudices.

**Unconscious Associations Prejudice, And Post-racial America**

We conceptualize unconscious prejudice involving race as resting on two major foundations: (1) the unconscious and nonrational associations that humans make in virtually every realm of our lives and (2) historical and persisting patterns of racial inequality, including the particular discourse around race that characterizes the twenty-first century United States, or what Bonilla-Silva (2006) termed “color-blind racism.” We address each foundation in turn.

**Unconscious Associations**

The first foundation of unconscious racial prejudice is the more general phenomena of unconscious cognition and unconscious associations. According to psychologists, human beings’ cognition can be conceptualized as running along two parallel tracks. Some situations are conducive to deliberative and rational thinking. More frequently, however, situations do not allow such thoughtful responses; instead, cognition in these contexts is automatic and unconscious. Studies by scholars concerned with how humans justify their actions indicate that much of human decision making is unconscious and nonrational, with the conscious mind used to develop post hoc justifications (Haidt 2005; Prasad et al. 2005; Vaisey 2008; Ziegart and Hanges 2005).

Numerous examples suggest the significance of unconscious judgments and associations. For example, scholars have shown that the physical attractiveness of hypothetical political candidates unconsciously shapes subjects’ evaluation of their suitability for office (Hart, Ottati, and Krumdick 2011; Sigelman et al. 1986). Interviewers given cold drinks are especially likely to rate interviewees as “cold” (Wiseman 2009:136) but are unaware that this bias shapes their responses. Office workers asked to pay for coffee and bagels on an honor system are more honest when the sign asking them to pay bears a picture of a person’s eyes (unconsciously suggesting being watched) than a nature scene (Vedantam 2010:25-28). When researchers dropped dozens of wallets, each containing a card bearing the purported owner’s address, throughout the streets of a British city, wallets containing a photograph of a large-eyed baby were far more likely to be returned than wallets with other photographs, suggesting a nonrational response rooted in protective feelings (Wiseman 2009:78-81).
Overall, the picture that emerges from this vein of research is that humans think and act on an unconscious basis to a much greater extent than is commonly assumed.

**Racial Inequality and Racial Discourse in Twenty-first Century America**

If unconscious associations broadly are one foundation of unconscious racial prejudice, racial inequality, in particular in its modern manifestation, is the second. Unconscious associations do not vary randomly across individuals. Rather, they reflect group differences in power and prestige, with traits of more powerful groups enjoying positive associations and traits of subordinated groups assigned negative valence (Blumer 1958). Because significant racial inequality has existed for centuries and still exists in the United States (Vedantam 2008), with white Americans advantaged over African Americans and with other racial groups arrayed in between, the associations our minds make can be expected to systematically value “whiteness” while devaluing “blackness” (and other forms of “non-whiteness”).

If unconscious associations and objective racial inequality were the sole bases of unconscious prejudices, we might find that most people who hold such biases freely acknowledge the possibility that they might be biased. However, because of the transformation of the American racial order in the second half of the twentieth century, this is not the case. In our view, racial prejudice has not disappeared, though it has declined, in “color-blind” America (Bonilla-Silva 2006; Gallagher 2003, 2008; Wise 2010). Instead, prejudices in modern America wear two cloaks. First, prejudices may be unknown even to the person who holds them, a view emphasized by Gladwell (2005:72-98) and Vedantam (2010). For example, Gladwell discussed his shock at discovering his own previously unrecognized racial biases. Second, those holding racial prejudices may be somewhat aware of these prejudices but obscure them in various ways. Individuals holding prejudices may simply deny them to researchers (Bobo, Kluegel, and Smith 1996), while still endorsing and acting on them. Alternatively, people may develop ideologies and frames for thinking about race that allow them to maintain prejudices while morally distancing themselves from bigots and racists (Bonilla-Silva 2006).

This boundary between unconscious and conscious but unacknowledged bias, at a time when open admission of bias has become unacceptable, is not always clear. People who hold racial biases, but claim not to, may vary in how much they are conscious of such biases. Regardless, our use of the unconscious prejudice terminology allows us to convey an important idea to students in a less threatening way than if we assume that people’s unacknowledged associations are conscious but denied. Here, we use the term unconscious prejudice to refer to prejudice that may be anywhere from fully to partially unconscious. The crucial issue is not where exactly certain biases fall but rather that such biases are widespread and significant.

Indeed, a great deal of evidence suggests that many people hold unconscious negative associations toward racial minorities, especially African Americans, and that these associations affect people’s behavior. For instance, study subjects who read depictions of people on welfare in which the characters were depicted as African American were more negative toward welfare programs than those who read the same scenario with white characters (Gillens 1999; Vedantam 2010:201-208). Studies asking subjects how they would address crimes by illegal immigrants described as “from Mexico” in one version and “from Canada” in another (Vedantam 2010:201-208) have found similar results. Similarly, an experimental study that sent out thousands of identical résumés to employers but varied the names on the résumés to be either “white sounding” or “black sounding” found that résumés with “white-sounding” names got 50 percent more callbacks than those with “black-sounding” names (Bertrand and Mullainathan 2004). A more recent experiment found that state legislators in the United States were more likely to respond to requests for information on how to register to vote when the requests originated from “white-sounding” e-mail addresses rather than “black-sounding” addresses, even when the purported political party of the sender and the actual party of the legislator were held constant (Butler and Broockman 2011).

Unconscious associations around race can matter even in matters of life and death. A report by
New York State found that most off-duty officers killed by “friendly fire” in the past few decades were African American, indicating that police officers’ snap judgments involve racial cues in assessing threats (theGrio 2010). Eberhardt et al. (2006:385) found that African Americans eligible for the death penalty who looked “more stereotypically black” were twice as likely to receive death sentences as those with “whiter” features; they argued that people associate “black physical traits” with criminality and that “jurors may treat these traits as powerful cues as to deathworthiness.”

Despite scientific consensuses that race shapes people’s unconscious associations and that unconscious associations affect behaviors, it is not uncommon for us to have students who claim to “not see race”; we believe that our experience is not unique. Popular discussion embraces understandings of prejudice and racism that are individualistic and overt and neglects unconscious or unintentional aspects. In contrast, our analysis is framed by Tatum’s (2003) suggestion that we think of racial stereotypes (and other forms of prejudice) as like smog surrounding a city: Even those who are well intentioned are often affected by the “smog” of our culture.

Numerous published pieces have addressed various aspects of teaching purportedly “color-blind” students about race (e.g., Khanna and Harris 2009; Laundra and Sutton 2008; Obach 1999; Townsley 2007). Other published exercises, such as Stratification Monopoly (Coghlan and Huggins 2004) and the Privilege Walk (Iпас n.d.), propose powerful methods of teaching about privilege and institutional discrimination, which parallel unconscious prejudice as dimensions of inequality that are not reducible to individual bigotry. Most closely related to the method proposed here, Bordt (2004) presented a simulation exercise in which students act as jurors deciding the punishment in a murder case but are not told that there are multiple versions of the scenario that vary the characters’ races. The exercise is used to show students that they may harbor prejudices. We built on Bordt’s exercise and her brief discussion of IATs by demonstrating a method for using these tests to teach students that they may unknowingly internalize and perpetuate systems of oppression.

**Unconscious Prejudice: A Teaching Exercise**

Our approach to teaching about unconscious prejudice occurs in two phases. Phase 1, which takes 20 to 30 minutes, introduces the idea of unconscious prejudice and shows students how to complete an out-of-class assignment using the IAT Web site. Phase 2, which uses a full class period, involves debriefing students on their experience of taking the test, further elaboration on unconscious prejudice, and discussion of how this idea relates to discrimination and racism. We believe our exercise is most effective at least several weeks into a class, after the instructor and students have established rapport.

**Phase 1: Introducing the Concepts and Assignment**

In Phase 1, we introduce the concept of unconscious prejudice and prepare students to take the IAT outside of class. We begin by explaining that the assignment centers on the idea that many people hold unconscious negative associations toward African Americans. We introduce the premise that most people more readily associate certain words and ideas with some groups of people than others by passing out worksheets modeled after the “paper” IATs presented by Malcolm Gladwell (2005:72-98) in Blink (see Appendix A for a sample worksheet). These paper IATs present 20 words, including common male and female names along with terms such as laundry, capitalist, kitchen, and merchant. Test takers are instructed to indicate which words fit with the category “male/career-related” and which go with the category “female/family-related.” In the next version, however, the pairings are altered so that test takers place the words in the categories “male/family-related” or “female/career-related.” Thus, one version of the exercise is “intuitive” to the expectations of our society, and the other is socially “counterintuitive.”

After students do this exercise, we ask how long they took on each version and why. Students generally find it faster to pair “family” words with women and “career” words with men. We explain that most people can complete one test
more rapidly because our minds have been socially conditioned to group women with family and men with careers. This example IAT provides a clear, nonthreatening introduction to the idea that people group ideas in ways that are shaped by larger social patterns.2

We then go online and project on a screen the Web site for the online IAT (http://implicit.harvard.edu), follow links to go to the “demonstration” tests, and choose the Race IAT. This test focuses on implicit associations involving whites and African Americans; however, there are other choices that focus on people with light or dark skin and on whites compared with Arabs or Muslims, Native Americans, or Asian Americans. We use the white-black test because white-black inequality is especially pronounced and central to America’s historical conception of race; other tests may be equally useful depending on the instructor’s interests and the focus of the class.

We skip the initial screen with an array of attitudinal questions, explaining that these questions are not relevant to calculating one’s unconscious associations. We begin taking the Race IAT, showing students that the site offers an electronic version of the “paper” IAT but one that can measure response times to the millisecond. We go far enough in the test to demonstrate at least one section in which positive and negative words are paired with images of white or African American faces, so students understand that the test measures how quickly the test taker is able to classify stimuli accurately when “good” and “white” are paired on one side of the screen (against “bad” and “African American”), compared with their speed when “good” and “African American” are paired together. We emphasize the importance of students going as fast as possible when they take the test so that responses are automatic rather than well calculated.

After demonstrating how the online IAT works, we tell students that we have taken the Race IAT previously and that the test finds us, like the vast majority of test takers, to be quicker in our responses when “white” and “good” are grouped together than in the opposite grouping. We also point out that the tests’ designers themselves have repeatedly taken the IAT and have found similar results. We mention that even half of African Americans, and a majority of other nonwhites, are quicker to associate white faces with good words and African Americans faces with negative words than vice versa. We emphasize that the IAT does not measure actions or even conscious beliefs and that it is designed to measure influences we have unknowingly picked up from our social context. We mention that we have found knowing our IAT results useful in helping us be aware of and counter potential biases in how we interact with people; the way we disclose our own results parallels the approach taken by Bordt (2004:365). Because students may be fiercely defensive against any suggestion that they harbor prejudices, we believe these points are crucial in opening students’ minds to the possibility that they may in fact unconsciously harbor some prejudices that they consciously reject.3

Before ending the class period, we show students where to find the IAT assignment on the class Web site (see Appendix B) and explain that there are four tasks they should complete: (1) take the Race (“Black-White”) IAT; (2) read an excerpt from “The Warren Harding Error,” a chapter in Malcolm Gladwell’s (2005) book Blink that explains the idea of unconscious associations and their link to race; (3) answer a series of questions about the test; and (4) submit a printout of their IAT results and answers to our questions, when the assignment is due.

**Phase 2: Debriefing and Discussion**

We begin class on the due date by giving several striking examples of the power of unconscious associations (see above and Appendix C for examples). Once we have established the significance of unconscious cognition, we pivot to examples that show that unconscious associations are patterned in ways that reflect and reinforce structural inequality. We also bring in the idea that these associations affect behavior. Here, we give some examples that relate to race, such as Eberhardt et al.’s (2006) study of the perceived “blackness” of convicted killers and the shooting of Amadou Diallo (see Appendix C). We also reference Gladwell’s (2005) argument from the assigned reading that unconscious associations toward African Americans can affect job interviews.
At this point, we shift to a discussion format. The starting point and key questions vary depending on the class, but we often start by asking for feedback about the assignments and the students’ experiences with the IAT. Two potential starting questions are how students felt while taking the test and whether they noticed any differences in their speed when associations changed from socially intuitive to counterintuitive pairings. We also ask students whether their results showed them to be more “pro-white,” “pro-black,” or neither, and why they think this is. Nonwhite students often volunteer their results early on in class, which can provide an interesting opportunity for discussion of why many African Americans, and most people of color, are quicker to pair positive words with white faces than with African American faces.

Instructors should be prepared for the discussion to head in a wide variety of directions at this point. Although many students are supportive of the IAT’s validity, some students critique the test. Perhaps the most serious criticism of the IAT is that results are not always stable across multiple attempts. If any students choose to take it twice, they may point this out. In response, we agree that the results are not perfectly stable, just as SAT scores and measures of one’s physical strength are not perfectly stable, but explain that results do not fluctuate greatly and that some instability is inherent to most measurements. We also point out that one can “learn” how to take the test by slowing down, just as one might learn techniques to score better on the SAT without necessarily becoming more intelligent, but that this is much less likely if test takers go as fast as they can to prevent their conscious minds from overtaking their unconscious minds. Last, we mention that this criticism is consistent with the idea that we are influenced by social context. One of our white students once mentioned that his IAT score changed to reveal less bias toward African Americans when he retook the test immediately after spending time with an African American friend. This potential for context to shape associations is exactly what Gladwell (2005:96) has in mind when he suggests that readers “think of Dr. King” as a means of altering unconscious prejudices.

Other critiques of the IAT’s validity that students may raise are generally weaker. For example, though some students claim that their results were affected by being left- or right-handed, we point out that the setup of the test renders moot any effect this might have. The argument that results are influenced by which setup a student confronts first (whether positive words were initially paired with white or with black faces) is addressed with reference to the “FAQ” section of the Web site (IAT Corporation 1998-2012), which reveals that order effects only matter slightly; we also point out that the order of sections is randomized, so half the students saw positive words paired with white faces first and half the students saw the reverse to begin. We also explain that the critiques that “we needed time to get used to the exercise, so we were slower on the first pairing” and that “we got used to doing it one way and were disrupted when the sides switched, so we were faster on the first pairing” directly contradict each other. If any students suggest that the results merely reflect the fact that whites are the majority, we agree to a point but also point out the distinction between statistical majorities and power majorities (giving examples such as the high status accorded “whiteness” in much of South Asia).

Generally, students’ interest is quite high by the time class begins to draw to a close, and we bring an end to open discussion to emphasize four points (or to draw out these points from the class, with questions). First, we highlight connections between unconscious associations and key concepts from the course that we have previously covered. For example, in criminology classes, we tie the idea of unconscious prejudice into labeling and critical theories of the criminal justice system. Second, we take care to define institutional racism and remind students, either here or later in the course, that structural racism is not reducible to individual attitudes, whether conscious or unconscious. Third, we point out that many “good” people, including some active antiracists, score as having negative associations toward African Americans, that behavior is more important than unconscious associations, and that recognizing our associations is a key step in limiting their influence on our behavior. Finally, we make sure to discuss the closing section of Gladwell’s chapter, “Think about Dr. King,” which suggests some ways that unconscious associations can be challenged.
Data Collection On Effectiveness

Although we have used this exercise several times in classes with fewer than 35 students, the data below on effectiveness were collected during the 2010-2011 academic year at a large public university in the southeastern United States. The student body of the university is more than 90 percent white, as is the population of the town and region of the state in which this university is located. To obtain effectiveness measures from as large a sample of students as possible, rather than use our own relatively small classes, we guest-presented our lesson plan in two large Introductory Sociology courses. These courses had more than 300 enrolled students; their racial composition was 95 percent white, 2 percent African American, 2 percent Latino, and 1 percent other racial and ethnic groups. These students had not yet been exposed to discussions of race, prejudice, or discrimination in these courses. The classes consisted mostly of first-years (35 percent) and sophomores (30 percent). On the basis of institutional review board requirements, we modified our standard approach by making the response assignment optional for extra credit. Because our data collection spanned several phases and students could opt out of any, the sample size ranged from 155 to 290 students, with the part that required out-of-class work yielding a smaller sample than parts that simply required being in class. Although our use of classes other than our own to collect outcomes data is in tension with our suggestion to first build rapport over several weeks, if anything, this biases our results in a conservative direction, because students are more likely to respond defensively to near strangers than they are to known instructors.

To measure our lesson plan’s effectiveness, we collected “pretest” data measuring students’ views about prejudice and racism by visiting the classes and having students fill out a brief questionnaire two weeks before we presented our lesson plan. The survey included five-point ordinal scales asking them to choose responses, ranging from “strongly agree” to “strongly disagree,” to the following items: (1) “Most people in our society probably have some prejudice against African Americans, whether conscious or unconscious”; (2) “Whether I want to or not, I personally may have some prejudices against African Americans”; and (3) “The possibility that we have unconscious prejudices about race (and other topics) is something we should be concerned about.” This visit took about 15 minutes. Two weeks later, we returned and led the actual exercise over parts of two class periods. We also collected all the completed IAT assignments from the students at the start of the phase 2 class. In the last 10 minutes of the phase 2 class, students filled out a final evaluation sheet that repeated several questions that had been asked in our pretest and in the IAT assignment. This last survey also included additional questions about the effectiveness of various pieces of the exercise.

Results

We consider two sets of outcomes measures: students’ views on the seriousness of unconscious prejudice at different stages of the process and students’ self-reports of the effectiveness of the exercise. Table 1 presents our findings on the first set of measures, on five-point scales ranging from “strongly disagree” (1) to “strongly agree” (5), at different stages. After completing the test, reading, and written assignment, students were markedly more open to the idea that most people hold some anti–African American prejudices than they had been when sampled in the pretest. Also, students at the second stage were more accepting that they personally might hold racial prejudices than they had been in the pretest. These differences (significant at $p < .001$) are noteworthy and important, as we are aware of no research in the scholarship of teaching and learning that shows comparable effectiveness for any rapid technique of teaching about unconscious prejudice.

Qualitative data from students’ written responses further show that the exercise was effective in leading students to realize they might hold unacknowledged prejudices. One student wrote that of learning that

no matter how boldly you might state “I am not racist,” it is impossible to completely avoid cultural influences that shape our core beliefs about people of a different color. The IAT is one of the best ways to make clear that racism still exists on a subconscious level.
Table 1. Students’ Views of the Prevalence and Significance of Racial Prejudice.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Initial Stage</th>
<th>Second Stage</th>
<th>final Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most people in our society probably have some prejudice against African Americans, whether conscious or unconscious.</td>
<td>3.84</td>
<td>4.17*</td>
<td>4.20*</td>
</tr>
<tr>
<td>Whether I want to or not, I personally may have some prejudices against African Americans.</td>
<td>2.76</td>
<td>3.53*</td>
<td>—</td>
</tr>
<tr>
<td>The possibility that we have unconscious prejudices about race (and other topics) is something we should be concerned about.</td>
<td>4.01</td>
<td>4.05</td>
<td>4.04</td>
</tr>
<tr>
<td>n</td>
<td>290</td>
<td>155</td>
<td>162</td>
</tr>
</tbody>
</table>

Note: Measures are of difference from the initial sample. Because of a printing error, we did not ask the second question in the final evaluation.

*p < .001 using independent-samples t-tests and a five-point scale.

Another wrote, “I learned many people have unconscious prejudices. The lesson plan was eye opening and helped me realize that people do not realize they have these beliefs.” A third student wrote, “I was a bit surprised and upset because [the assignment] helped me realize how privileged I am. I knew that people had unconscious prejudices, but I didn’t think I was one of them.”

Two limitations of our approach are observable in this first set of measures. At the third stage, students were no more accepting that they or others might hold prejudices against African Americans than they were in the second stage. In other words, although we found strong evidence of attitude change from taking the test, doing the reading, and doing the assignment, we did not find comparable evidence of additional benefits from the in-class discussion by this measure (below, we discuss additional measures that suggest that the discussion itself was in fact useful). There was also no movement on the question asking whether we should “be concerned” about unconscious prejudices. Despite these limitations, Table 1 shows that students became far more accepting of two of our three key ideas about unconscious prejudice than they were initially, indicating that much of our approach was successful.

Our second set of outcomes measures is from students’ self-reports. On the final evaluation form, we asked students directly about their views on various aspects of the exercise, again on a five-point scale ranging from “strongly disagree” to “strongly agree.” Table 2 presents these measures, with the sample for questions about specific aspects of the assignment restricted to only students who indicated they had done that component. Overall, students saw our approach as effective in teaching about unconscious prejudice, with mean responses to every dependent variable clustering around the “agree” option. Students were most positive toward the lecture-discussion out of all the components of the exercise, suggesting that the lack of change in students’ measured views between doing the take-home assignment and participating in the lecture-discussion (mentioned in the preceding paragraph) was likely because not all participants in the discussion had done the assignment, rather than that the discussion was futile. In conjunction, the overall changes in students’ views of the prevalence of unconscious prejudice across the waves, combined with the final sample’s self-reports, suggest that our approach was effective. We believe the exercise might be even more effective in smaller classes, in contexts in which the presenters have had several weeks to build rapport with the class and in more diverse classrooms and universities.

Qualitative data highlight one final benefit of our exercise. Although we did not see the assignment as a direct means to eliminate students’ prejudices, numerous students mentioned that the assignment helped them see the importance of
Conclusion

Most students have strongly ingrained assumptions about race and other axes of inequality. This means that whatever they are taught about such topics in sociology classes is at risk for remaining mostly unlearned: Those taught about unconscious prejudice as an intellectual abstraction may regard it as other peoples’ problem or as a figment of sociologists’ imaginations. Our exercise moves past this applicability divide between the classroom and real life by pushing students to confront evidence of their own and their peers’ unconscious racial associations. Because most students’ understanding of racism is centered on “pre-Civil Rights Era racism” that is not widespread in America today (Bonilla-Silva 2006), this is an important jump to make. As one student wrote, “I like learning things like this. This will have an effect on students outside of the classroom.”

The approach we have presented here helps show students that we are not as rational as we like to imagine, that our unconscious minds may harbor prejudices we pick up from our social context, and that reflecting on our unconscious associations is necessary to limit the effect of such associations on our behavior. Although the example we have presented here concerns race, the method we discuss can work well for instructors interested in many other issues. Although we do not rid students of unconscious prejudice, our exercise helps students understand that the “enemy” is not simply

Table 2. final Student Evaluations of Our Approach and Its Components.

<table>
<thead>
<tr>
<th>Statement</th>
<th>M</th>
<th>Valid n</th>
</tr>
</thead>
<tbody>
<tr>
<td>The IAT really reveals something about my society/the culture I live in.</td>
<td>4.03</td>
<td>130</td>
</tr>
<tr>
<td>Whether I like my IAT score or not, it captures something important.</td>
<td>3.99</td>
<td>130</td>
</tr>
<tr>
<td>The IAT reflects something about my automatic thoughts and feelings</td>
<td>3.81</td>
<td>130</td>
</tr>
<tr>
<td>concerning this topic.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The IAT test itself helped me better understand the idea of unconscious</td>
<td>3.96</td>
<td>130</td>
</tr>
<tr>
<td>prejudice.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The written response helped me better understand the idea of</td>
<td>3.60</td>
<td>115</td>
</tr>
<tr>
<td>unconscious prejudice.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The reading helped me better understand the idea of unconscious</td>
<td>3.83</td>
<td>123</td>
</tr>
<tr>
<td>prejudice.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The class lecture/discussion helped me better understand the idea of</td>
<td>4.20</td>
<td>158</td>
</tr>
<tr>
<td>unconscious prejudice.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The IAT test, response, readings, and discussion in conjunction helped me</td>
<td>4.01</td>
<td>144</td>
</tr>
<tr>
<td>better understand the idea of unconscious prejudice.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: All responses are on a five-point scale.
“bigots out there.” Rather, unequal social structures shape the individual consciousness of even well-meaning, consciously unbigated individuals. Acknowledging that our good intentions and positive self-conceptions have not shielded us from the smog of racism is an important first step toward dispersing that smog.

APPENDIX A

Sample In-class Test on Gender Associations

From Gladwell (2005:78), this is the socially “intuitive” version of this test. To generate a counterpart socially counterintuitive version, simply change the headings to “male or family” and “female or career.” Alternatively, see Gladwell’s (2005:79) second, slightly different, version of the test.

Male or career               Female or family
________________________    ____________________
                  Lisa               ____________
                  Matt               ____________
                  Laundry            ____________
                  Entrepreneur      ____________
                  John               ____________
                  Merchant           ____________
                  Bob                ____________
                  Capitalist         ____________
                  Holly             ____________
                  Joan              ____________
                  Home              ____________
                  Corporation       ____________
                  Siblings          ____________
                  Peggy             ____________
                  Jason             ____________
                  Kitchen           ____________
                  Housework         ____________
                  Parents           ____________

APPENDIX B

Written Response Assignment

1. Read the assigned excerpt from BLINK. When you’re done with that, continue here.
2. Go to https://implicit.harvard.edu/implicit/ and click to go to the “demonstration” test (not the “research” test). Then click again to “go to the demonstration tests” (not the “featured” test). Click “I wish to proceed.” Once you get to the list of possible tests, choose the Race IAT. You may need to hold down the control key if you have a pop-up blocker. Follow links such as “click here to begin,” etc.
3. Skip the opening questions about your demographic information and attitudes—these questions are NOT used to compute your score. Just scroll down to the bottom and click “OK” on these two screens only.
4. Read the directions that come up on-screen next carefully. Only THEN click “I am ready to begin.” Please go as quickly as you can WITHIN each section, but use the pauses between sections to write up notes that you will later use in answering the questions below. When you’re done, answer the follow-up questions on the screen at the end, and make sure you read the final page that explains your results.
5. Print out your results page.
6. Answer the questions below. Turn in a typed and stapled writeup of this page with your name on it, your results page, your answers to the open-ended questions, and your responses to the closed-ended questions.

Questions:

1. Based on your understanding of what you did and read, how does the test arrive at its measure of test-takers’ levels of unconscious prejudice?
2. What was your test result? Were you surprised? Why? If your results don’t match what you expected, why do you think this is?
3. Many minority group members appear to have stronger association with the majority group than vice versa. For example, with race, about half of black Americans’ test results show a “pro-white” preference, while only about 20 percent of
whites show a “pro-black” preference. Why might this be?
4. What do you think this test shows? If you think it has flaws, explain them and address how serious they are. If you think it shows something significant, explain what this is. (Draw on the BLINK reading here if you want.)
5. If someone thought the point of the test was to show that most people are mean-spirited bigots, would you agree or disagree, and why?
6. Do you think subconscious biases can be overcome? How? (Or if not, why not?) Does it matter? Why?

Students chose an answer on a five-point, Likert-type scale to three additional items:

Most people in our society probably have some prejudice against African Americans, whether conscious or unconscious. Whether I want to or not, I personally may have some prejudices against African Americans.
The possibility that we have unconscious prejudices about race (and other topics) is something we should be concerned about.

APPENDIX C
Some Examples of Unconscious Associations for Use in Class Discussion

For ease of reference, all examples listed here are found in Gladwell (2005), Vedantam (2010), or Wiseman (2009).

General Examples

- People who, as part of an experimental manipulation, saw several words that connote old age among a larger group of words, walked more slowly immediately afterward than people who saw non-aging-related words, even though they did not consciously recognize the

hidden theme of the words they had seen (Gladwell 2005:52-53).
- Contestants on a quiz show who were assigned the middle positions in a semi-circle were less likely to be voted off the show than contestants who were assigned positions near the edges. Our unconscious minds associate centrality with importance (Wiseman 2009:50).
- People who read short rhyming sayings were more likely to agree with the claims made in those sayings than people who read substantively identical statements worded to not rhyme. Our unconscious minds find rhyming statements more repeatable and therefore are more likely to assume that they are true (Wiseman 2009:61).
- Experimenters mailed surveys to a set of subjects, with the name of the person listed in the return address manipulated to either match or not match the recipient’s first name. Surveys were returned to identical first names at nearly double the rate that they were returned to different first names (Wiseman 2009:62).
- Reflecting unconscious associations between height and leadership, the average height of U.S. Fortune 500 male CEOs is three inches greater than the height of the average American man. Net of other factors, among the general population, an inch of height translates into $789 more a year in salary, on average (Gladwell 2005:86-88).

Examples Regarding Race

- Amadou Diallo, a Guinean immigrant, was shot 41 times by police officers in the South Bronx in 1999, in part because of officers’ unconscious cognition relying on cues from his appearance (Gladwell 2005:189-97).
- Among African Americans on death row convicted of killing whites, those who looked more stereotypically black were sentenced to capital punishment at more the twice the rate of those who looked
less stereotypically black (Vedantam 2010:175-77).

- People experimentally exposed to images of black faces and then asked to identify images misidentify images of wrenches as images of guns more often than people exposed to images of white faces do (Gladwell 2005:232-33).

- People who hear descriptions of an African American family on welfare are more negative toward welfare than those who hear identical descriptions with a white family substituted for the African American family. Similarly, test subjects recommended a harsher prison sentence for a crime when the attacker was described as a Mexican illegal immigrant named Juan than as a Canadian illegal immigrant named Dave (Vedantam 2010:200-203). Unconscious associations around race can affect situations such as job interviews. If an interviewer has negative associations toward African Americans, he or she may behave in ways that make African Americans candidates less comfortable, affecting performance (Gladwell 2005:85-86).

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NOTES

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1. Otherwise, students may become defensive against the idea that “good people” are implicated in prejudice and may resist a “strange” authority figure seeming to accuse them of unknowingly having views they consciously want to reject. This point may be especially salient when the instructor is a person of color but should be considered by all instructors.

2. We suggest designing the worksheets so that half the students complete the “counterintuitive” version first and half do the “intuitive” version first, to disarm the claim that slowness in the counterintuitive version was due to which version was presented first.

3. In some classes, we have demonstrated the mechanics of the IAT by using an Age IAT that pairs older or younger looking faces with positive and negative adjectives, waiting until phase 2 to reveal our own results from the Race IAT. Most students easily accept that we have age-related biases, so the Age IAT is a gentle introduction to the idea that we also hold unconscious racial biases. Using the Race IAT to introduce the concept may be more jarring, because some may interpret the instructor’s results as evidence of bigotry, but is useful because it clarifies that the assignment is not designed to show that holding implicit biases makes one “bad.” We suggest instructors try both approaches (in different classes) and use whichever method works best.

4. We did not collect data on how students’ race affected their reactions, for two reasons. First, as explained on the IAT Web site, most Asian and Latino Americans, and half of African Americans, have more positive associations with white faces than black faces. Second, the classes were overwhelmingly white, making comparisons by race of students untenable.

5. We note one limitation of our measurement of one set of outcomes: Because we did not collect individual identifying information on our questionnaires (because of institutional review board requirements), we were unable to limit our analysis of students’ views on unconscious prejudice to only students who participated in all waves of the measurement. Although we therefore cannot make as many statistical assumptions as we would with panel data, we simply treat the three waves as three samples. Even with our more conservative approach, our findings are significant at a very high level; they are also generally consistent with student self-report measures from the final evaluation.

REFERENCES


**AUTHOR BIOGRAPHIES**

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