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ABSTRACT
Stereotyping and biases continue to be a problem in many facets of society. Understanding how biases may affect recruitment and retention of employees has become a priority issue for companies, not only from an image perspective but also from a firm performance perspective, since both research and industry experience have shown that diverse teams generate better results. The need to address these issues, particularly with students who will become leaders in organizations, remains a priority in business education. In this article, we present an experiential activity that management instructors can use to help students understand and appreciate the reality and power of unconscious bias. The focus of this activity is on uncovering gender bias, yet the basic framework of the activity can easily be adapted to focus on other types of unconscious bias and stereotyping.

KEYWORDS
Bias; experiential exercise; gender; recruitment; retention; stereotype

Preparing business students to succeed in a diverse and multicultural world is a key aspect of management education (MacNab, 2006). As future managers, students need to appreciate and understand the benefits firms derive from embracing diversity and how it can lead to positive outcomes for companies. For example, Van Knippenberg, De Dreu, and Homan (2004) have shown that diversity provides teams with divergent views that lead to improved problem solving, while Dezso and Ross (2012) found that gender diversity in top management teams led to better firm performance. In fact, a “Diversity Matters” report for McKinsey & Company that examined 366 public companies in various industries across the globe found gender-diverse companies outperformed their peers by 15% in financial returns. Furthermore, companies that were in the bottom quartile in gender-diversity resulted in lower-than-average financial returns than their peer group (Hunt, Layton, & Prince, 2014).

Given such benefits, companies have realized a need to increase the diversity of their workforce. For example, desirable technology employers, such as Google and Yahoo, have experienced difficulty recruiting and retaining a highly diverse workforce, and acknowledge the negative implications for their industry (Hu, 2014; Manjoo, 2014). In response to pressure to divulge statistics about their workforce diversity, Google, Yahoo, Twitter, LinkedIn, and other technology companies have recently released “diversity reports.” In its report, Google noted that women make up only 17% of its workforce in technical roles, and only 1% of its workforce is black and 2% is Latino (Johnston, 2014). In an interview on the PBS Newshour, Laszlo Bock, Google’s head of “People Operations,” stated that although it had not released information on its workforce diversity in the past for competitive reasons, Google decided it needed to go public with the issue because “we [Google] have an issue, our industry has an issue, and the only way to have an honest conversation about this is to start by actually sharing the facts.” While the Google report identifies educational pipeline issues in STEM (science, technology, engineering, and mathematics) disciplines, Bock also cited as a key factor the problem of “unconscious bias,” in which employees treat each other in ways that they don’t even realize marginalizes them. As one step in addressing the issue, Google has initiated internal training to help employees identify their biases. Similar to Google, Twitter’s announcement of its diversity numbers revealed that only 10% of its technology workforce is women. Furthermore, despite Twitter having a stronger following among Black and Hispanic Internet users than among White Internet users, neither the Black nor the Hispanic demographic group exceeds 3% of Twitter’s
workforce (Zakrzewski, 2014). Twitter’s Vice-President for Diversity and Inclusion outlined a number of diversity initiatives the firm is pursuing, but acknowledged that “like our peers, we have a lot of work to do” (Zakrzewski, 2014, para. 8).

While the technology industry may have been visible in the reporting of its diversity numbers, gender stereotyping and its potential negative effect are not limited to the technology industry (Prime, Jonsen, Carter, & Maznevski, 2008). Research has examined gender stereotyping in the military (Archer, 2012), the financial services industry (Heilman & Eagley, 2008; Kusterer, Lindholm, & Montgomery, 2013), and higher education (Moss-Racusin, Dovidio, Brescoll, Graham, & Handelsman, 2012). For example, in her 2012 study, Archer found female marines often confront double standards that arise from gender stereotypes. For the marines in leadership positions, this not only negatively affects the female leader but also her subordinates, which can result in lack of unit cohesion, lower morale, and lower effectiveness as a fighting unit.

The burden of addressing diversity is not solely the responsibility of companies. Academia needs to better prepare students by helping them understand the benefits of diversity, while also learning how to recognize and reduce the negative outcomes associated with bias in the workplace. The exercise we present here is designed to be illustrative and to provide a forum for discussion of gender stereotypes as an unconscious bias. As Heilman (2001, p. 671) explains, “Gender stereotypes are the foundation of gender bias.” By creating an opportunity for students to reflect on the root causes of their behavior we, as educators, have a better chance of encouraging them to understand themselves and how they might become aware of the cognitive processes that drive their behavior (Chavez & Ge, 2007).

Bias and stereotyping can unconsciously influence a wide variety of business issues and decisions. Not only will students be better prepared to handle business situations if they are aware of their biases (Baker, 2010), but such awareness will also make them more successful as managers. At Google, Bock noted that its diversity factors in the workplace (see Lovelace & Chung, 2010). Classroom activities have been found to be successful when they allow students to experience classroom concepts involving the students’ values and attitudes (Chavez, Ferris, & Gibson, 2011). Therefore, this activity employs active learning, with the students working through a scripted scenario with a fictitious partner, reflecting on their own behavior, discussing the outcome with their peers, and receiving teacher-engaged feedback regarding their participation in the activity (MacNab, 2006). The students then gain deeper insight into how biases might affect their behavior, as well as the behavior of their managers, colleagues, and subordinates in their current or future workplace. Our aim was to create an exercise in which students could experience first-hand how bias might affect their own behavior. They might then apply this learning in a discussion about workplace situations in which bias could have unintended consequences.

We authored this case based on an adaptation of an episode from the British game show “Golden Balls.” This show is similar to the American version of “Friend or Foe.” In the game show, two contestants work together answering questions to create a pool of money. After playing the first part of the game, the contestants then must decide how to split the money that they have earned together. In this portion of the game show, the contestants will vote either friend or foe. If both contestants vote friend, they will split the money evenly. If both contestants vote foe, they will each walk away with no money. If one contestant votes friend and the other contestant votes foe, the contestant who voted foe will receive all of the money. Generally,
the two contestants try to convince their partner that they will be voting "Friend" and not "Foe." However, in one episode, one of the contestants took the opposite approach and stated that he was going to vote "Foe" and that the other contestant would need to vote "Friend." This would result in the player voting Foe to get the money and the other contestant would need to trust that player to share the money with them after the show.

In watching this episode, we wondered if this game-show format could provide an engaging exercise for students to examine biases and potentially reveal to themselves any unconscious gender bias they may have. Since gender stereotypes often characterize males as being more assertive, by using a scenario outside of the work environment, the assertive response by the figurative female partner in Cases 1 and 3 of this exercise can appear "unconsciously" counter-stereotypical, and the associated response by the students might be negative (Maas & Torres-Gonzalez, 2011; Rudman & Glick, 2001).

Using this exercise, we hope to overcome some of the challenges of uncovering a bias. As research has shown, self-reports of biases can be unreliable (Nosek, Greenwald, & Banaji, 2007; Nosek & Riskind, 2012; Wilson & Dunn, 2004). Furthermore, self-reports can also be influenced by the need to conform to "socially acceptable" responses (Dasgupta, 2013; Nosek et al., 2007). In fact, when we asked 93 undergraduates (who did not participate in this exercise) the question "Imagine you are working on a project team, one of your team members engages in aggressive behaviors during the meetings. Do you think it would change how you respond if the team member is a man or a woman?,” more than 85% (n = 80 students) responded that it would not make a difference. And yet, as seen later in this article, students responding to our scenario will respond differently based on the gender of their assigned partner. Thus, we believe the scenario created in this article can be an appropriate exercise to illustrate gender bias, and it creates an opportunity to discuss why biases happen and how biases could lead to unintended consequences.

Stereotypes, gender, and bias can be sensitive topics that not all students may be willing to discuss freely. Experience, culture, and upbringing can affect a student’s perspectives and biases, sometimes rendering discussions regarding such matters sensitive or uncomfortable. As Chavez and colleagues have noted, for many topics, students may have a different degree of readiness to engage in a public discussion (Chavez et al., 2011). However, Patton (2010) found that a good way to raise potentially sensitive gender issues in the classroom is through a self-reflection activity. The activity we present in this article does not require students to fully disclose all of their thoughts and feelings on the topic. Students first work independently and may choose not to write down everything they think. Later, as they work in small groups to discuss and reflect on the results, they can rely on others to express their ideas. Finally, the instructor has a role in maintaining a supportive environment for the exercise and can use rhetorical questions while debriefing to provoke self-reflection without the need for everyone to share aloud.

**Gender bias and stereotyping**

The decisions we make as employees or managers can be influenced by many different types of unconscious influences and associations (Chen & Bargh, 1997). In this exercise we focus on stereotyping, which is a heuristic or mental short-cut that allows us to simplify the complexity of our environment (Chavez et al., 2011), allowing our brains to categorize our surroundings. Judgments about people are automatically made (Bargh & Chartrand, 1999). This ability to reduce complexity has both advantages and disadvantages. On the one hand, this automatic process is less taxing on cognitive resources (Bargh, 1984; Bargh & Chartrand, 1999). On the other hand, implicit associations about a social group of people are often inaccurate (Banaji & Greenwald, 1994). That is, people in social groups are more likely to be different from one another than the same. Sometimes such simplifications, or heuristics, can result in a bias that results in an incomplete or inaccurate understanding (Bazerman, 2006).

Gender stereotypes are commonly held beliefs about men and women’s qualities and characteristics (Haslett, Geis, & Carter, 1992). For example, men are generally stereotyped to be self-confident, assertive, and adventurous, while women are generally stereotyped to be intuitive, understanding, and aware of others’ feelings (Heilman, Block, Martell, & Simon, 1989). One persistent gender stereotype is “think manager—think male,” first described by Schein (1975), in which characteristics commonly ascribed to males are associated with organizational leaders. Subsequent studies continue to find evidence of the same ideology (for review see Koenig, Eagly, Mitchell, & Ristikari, 2011). For example, Powell and his colleagues asserted that managerial stereotypes continue to emphasize a belief of “think manager—think masculine” (Powell, Butterfield, & Parent, 2002). Gender stereotypes also appear to be a global phenomenon in that cross-national research has documented that stereotyping
can have a negative effect on women’s career advancement (Berthon, Antal & Izraeli, 1993; Boosyen & Nkomo, 2010).

**Implications of stereotyping**

As indicated in the preceding, stereotypes often influence our beliefs about the characteristics, attributes, and behaviors of certain groups (Agerström & Rooth, 2011; Nguyen & Ryan, 2008; North & Fiske, 2012). While issues of unconscious bias can occur with any stereotypes, in this exercise we focus on gender stereotyping, which has a long history (Bakan, 1966; Eagly, 2012), and has been found to have potential implications for workplace outcomes such as recruitment, engagement, and retention (Eagly, Makhijani, & Klonisky, 1992; Maas & Torres-González, 2011; Rudman & Fairchild, 2004). For example, in a study with science faculty at six major institutions, Moss-Racusin and her colleagues found that faculty members were more likely to rate applications that were assigned male names as more hireable and competent. They also offered these applicants a higher starting salary and career mentoring over the identical applications assigned to female names (Moss-Racusin et al., 2012). Similarly, when top orchestras modified audition procedures to place a screen between the musician and the judges, rendering the judges unaware of the gender of the musician auditioning, there was an increase of 30% of women as new hires (Goldin & Rouse, 2000).

Gender bias may also have implications for engagement. For example, Bowles and her colleagues designed an experimental study in which a male confederate and a female confederate were videotaped using the same content in a workplace scenario. In the scenario in which the woman negotiated for higher compensation, the participants of the study perceived the woman as less nice and more demanding, leading the participants to report that she would be less interested in working with the woman (Bowles, Babcock, & Lai, 2007). Gender stereotypes in which women are not perceived as having leadership traits can also have detrimental career outcomes. A report from Catalyst (2005) highlights senior executive women consistently pointing to gender-based stereotyping as a barrier to their advancement. Such stereotypes and biases are not necessarily intentional. Kanter and Roessner (2003) found that organizational leaders made subliminal and unconscious assumptions about women that resulted in higher turnover rates for women. Due to the negative effects on both individual careers and firm performance, understanding how such stereotypical thinking can influence attitudes and behaviors is a useful classroom topic for students who aspire to be business leaders.

**Biases are malleable**

Stereotypes have often been considered stable (Allport, 1954). However, more recently, research has found that stereotypes are malleable (Devine, Forscher, Austin, & Cox, 2012; Garcia-Marques, Santos, & Mackie, 2006). Because stereotypes are not necessarily rigid, the implicit associations that an individual currently holds can be unlearned and replaced with more accurate mental associations (Lenton, Bruder, & Sedikides, 2009). For example, Hewstone and his colleagues found that stereotypical beliefs are reduced after exposure to disconfirming information (Hewstone, Hassebrauck, Wirth, & Waenke, 2000). Similarly, Devine and her colleagues found a decrease in self-reported racial bias after a training intervention that included steps of awareness and strategies to reduce bias (Devine et al., 2012). It is clear that raising awareness that stereotypes exist is an important first step in reducing biases (Devine et al., 2012; Stoker, Van der Velde, & Lammers, 2012).

By approaching an examination of gender stereotyping as an unconscious bias and a common human trait, it is possible for students to examine their own decision-making processes and to understand both gender and other biases that might affect them (Milkman, Chugh, & Bazerman, 2009). As Bazerman suggests, “Cognitive bias occurs in situations in which an individual inappropriately applies a heuristic when making a decision” (2006, p. 13). One reason for this may be that individuals often rely on System 1 thinking (surface-level information processing) rather than System 2 thinking (deep-level processing). System 1 thinking refers to more intuitive thinking and is characterized as automatic, implicit and relatively undemanding of cognitive capacity. On the other hand, System 2 thinking refers to explicit processing, slower and more demanding of cognitive capability (Kahneman, 2003; See Stanovich & West, 2000; for review). By becoming aware of their unconscious biases, students are in a position to make adjustments to their decision-making processes.

**Revealing gender bias exercise**

**Objectives**

This exercise has the following learning objectives:

1. Students will be able to understand and describe the concepts of biases and stereotyping.
(2) Provide students with the opportunity to articulate their understanding of the relationship between gender stereotypes and gender bias.

(3) Enable students to make connections between gender bias and workplace behavior and outcomes.

**Timing**

This exercise is targeted at upper-level undergraduate and MBA students in management, organizational behavior, diversity, and other related courses where understanding the effect of gender bias is included in the curriculum. We have used this exercise in the latter half of the course, when covering stereotypes in a diversity course, when covering leadership in a principles of management course, and in an MBA leadership course. This exercise can be completed in 75 minutes.

**Advance preparation by students**

Students do not need to prepare in advance for this exercise. We recommend assigned readings after the exercise. See Appendix A for recommendations.

**Exercise instructions**

This exercise involves an author-developed short case scenario based on a game-show format as is commonly done in classroom activities (Lovelace & Chung, 2010). The students will be handed a paper-based exercise. In the activity, students are told to assume they are contestants on a game show called “Friend or Foe” (a game show that premiered on the Game Show Network in 2002), in which they are paired with another contestant and have to decide what position to take in the game. See Appendix B for the scenario instructions.

**Preparing materials**

Prior to conducting the exercise in class, the instructor will prepare two versions of the case—one in which the other contestant is a woman and one in which the other contestant is a man. As can be seen in the scenario in Appendix B, the only difference between the two versions is the other contestant’s name and the pronouns used. The contestant names used in the cases should be both similar and familiar to the students, but gender specific. We used Patricia and Patrick since these names would not be uncommon in our classrooms.

Next, the instructor will assign students to a condition in which the fictitious other game show contestant is either the same gender as the student or the opposite gender, resulting in four possible cases as shown in Table 1. In the case of a transgender student, we would expect that the case assignment and reporting results would be included in the gender identity the student has expressed to the professor.

The instructor should assign students to each of these cases as evenly as possible. For example, for a class that has 36 students (e.g., 14 women and 22 men), 7 female students should be assigned Case 1 and 7 female students should be assigned Case 2, and 11 male students should be assigned Case 3 and 11 male students should be assigned Case 4. The instructor should code each handout with the condition number prior to handing out the case to assist in the debriefing of the exercise. By coding the handout, the instructor can easily tally the results by condition.

**Teaching notes**

**Instructions for running the exercise**

The case handout is provided to the students as two parts. In running this exercise, we have used separate paper documents (see Appendix B), and collected handwritten responses from the students. If an instructor is using a learning management system (LMS) in the classroom, separate assignments could be created for Part I and Part II and students could enter their responses in the LMS. Depending on the size of the class, this could simplify tallying up the voting results in step 5. At steps 1 and 3 we remind students not to include their names in the responses. If an LMS is used, this may not be possible.

Step 1: Introduce the exercise and complete Part I (10 minutes).

Distribute Part I of the case to the students and instruct them to read the scenario (Appendix B). The instructions inform students that while they have been on the show, they have successfully worked with a partner (whom they have not previously met and who is not a member of the class) to earn $5,000 as a team, and now they both have to decide how to split the money between them. Each student will have to decide whether their partner is a “Friend” or a “Foe” for purposes of determining how
the money will be shared. As detailed in the scenario, if both contestants vote “Friend” they will split the money evenly, but if they both vote “Foe” they both walk away empty-handed. If only one of them votes “Friend,” the contestant who voted “Foe” wins all of the money. Based on the minimal information provided about their partner who is either male or female (Patrick or Patricia), each student fills out Part I of the scenario with their initial thoughts regarding how they plan to vote and explains why.

Step 2: Instructor prepares for debrief.

While the students are completing Part I of the scenario, create two tables on the board for the results of Part I and Part II to facilitate the class discussion. See Table 2 and Table 3 as an example of the results from our undergraduate classes. Our undergraduate classes were 74 students: 36% female. Table 4 and Table 5 are examples of the results from our graduate classes. Our graduate classes were 65 students: 23% female. Before proceeding to Step 3, collect Part I with the student’s initial responses. Since the exercise is designed to solicit each student’s individual decision, although the results for Part I are shown in Table 2, the tallied results should not be presented or discussed until students have completed Part II in Step 3.

Step 3: Students read Part II of the scenario (7–10 minutes).

After all of the students have turned in their initial decision and reasoning, they are informed that they are allowed to discuss with their partner whether they will be voting Friend or Foe and are provided Part II of the case. Their partner states that he or she will be voting Foe and asks the student to vote Friend with the understanding that the partner will then share the money with the student. It is made clear in the instructions that this is a side agreement to later split the money and is not legally binding. Specifically, the partner says:

I am going to pick Foe, and either you pick Friend and trust me to split the money with you after the show, or you can pick Foe and we both walk away with nothing. I am 100% picking Foe. I am just being honest and you can trust me when I tell you I will split the money with you.

It is notable to point out that the only difference between the cases is that in one case scenario (Case 1 and Case 3) the partner is female and in the other case scenario (Case 2 and Case 4) the partner is male. All other language is identical. Second, the partner’s statement is purposely designed to reflect an aggressive stance in the scenario. Our aim in using this assertive statement is to trigger the potential for a perception of counternormative gender stereotypes. For example, men are generally stereotyped to be self-confident, assertive, and adventurous, while women are generally stereotyped to be intuitive, understanding, and aware of others’ feelings (Heilman et al., 1989). Therefore, the assertive behavior in the case by the female partner could be perceived as counter-stereotypical. The intent is to force each student to realize both their own vulnerability (they could end up with none of the money) and the assertive position being taken by their partner.

As a result, each student must make a decision about how to respond to their partner and the only behavior on which the student can make this assessment is the assertive statement (already shown) by their partner. The student is then asked to record in Part II what he or she might say in response to the preceding statement made by his or her partner. The student then also records his or her vote as friend or foe. The handouts for Part II with the student responses are collected for the tally presented in Step 5.

Step 4: Setting the stage for the debrief (15 minutes).

Before we get into the class results, we show the YouTube Video titled “The Monkey Business

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### Table 2. Outcomes for Part I: Undergraduate students (n = 74).

<table>
<thead>
<tr>
<th>Partner's name</th>
<th>Partner's name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male students</strong></td>
<td><strong>Female students</strong></td>
</tr>
<tr>
<td>Patrick</td>
<td>Patricia</td>
</tr>
<tr>
<td>(n = 47)</td>
<td>(n = 27)</td>
</tr>
<tr>
<td>Friend (78%)</td>
<td>Foe (22%)</td>
</tr>
<tr>
<td>(n = 27)</td>
<td>Foe (18%)</td>
</tr>
<tr>
<td>(n = 74)</td>
<td>(n = 74)</td>
</tr>
<tr>
<td>Friend (76%)</td>
<td>Foe (24%)</td>
</tr>
<tr>
<td>(n = 15)</td>
<td>Foe (17%)</td>
</tr>
</tbody>
</table>

### Table 3. Outcomes for Part II: Undergraduate students (n = 74).

<table>
<thead>
<tr>
<th>Partner's name</th>
<th>Partner's name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male students</strong></td>
<td><strong>Female students</strong></td>
</tr>
<tr>
<td>Patrick</td>
<td>Patricia</td>
</tr>
<tr>
<td>(n = 47)</td>
<td>(n = 27)</td>
</tr>
<tr>
<td>Friend (54%)</td>
<td>Foe (46%)</td>
</tr>
<tr>
<td>Foe (46%)</td>
<td>Friend (50%)</td>
</tr>
<tr>
<td>(n = 74)</td>
<td>(n = 74)</td>
</tr>
<tr>
<td>Friend (35%)</td>
<td>Foe (65%)</td>
</tr>
<tr>
<td>(n = 15)</td>
<td>Foe (50%)</td>
</tr>
</tbody>
</table>

### Table 4. Outcomes for Part I: Graduate students (n = 65).

<table>
<thead>
<tr>
<th>Partner's Name</th>
<th>Partner's Name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male Students</strong></td>
<td><strong>Female Students</strong></td>
</tr>
<tr>
<td>Patrick</td>
<td>Patricia</td>
</tr>
<tr>
<td>(n = 50)</td>
<td>(n = 15)</td>
</tr>
<tr>
<td>Friend (68%)</td>
<td>Foe (32%)</td>
</tr>
<tr>
<td>Foe (32%)</td>
<td>Friend (40%)</td>
</tr>
<tr>
<td>(n = 65)</td>
<td>(n = 65)</td>
</tr>
<tr>
<td>Friend (64%)</td>
<td>Foe (36%)</td>
</tr>
<tr>
<td>(n = 15)</td>
<td>Foe (33%)</td>
</tr>
</tbody>
</table>

### Table 5. Outcomes for Part II: Graduate students (n = 65).

<table>
<thead>
<tr>
<th>Partner's name</th>
<th>Partner's name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male students</strong></td>
<td><strong>Female students</strong></td>
</tr>
<tr>
<td>Patrick</td>
<td>Patricia</td>
</tr>
<tr>
<td>(n = 50)</td>
<td>(n = 15)</td>
</tr>
<tr>
<td>Friend (68%)</td>
<td>Foe (32%)</td>
</tr>
<tr>
<td>Foe (32%)</td>
<td>Friend (40%)</td>
</tr>
<tr>
<td>(n = 65)</td>
<td>(n = 65)</td>
</tr>
<tr>
<td>Friend (42%)</td>
<td>Foe (58%)</td>
</tr>
<tr>
<td>(n = 15)</td>
<td>Foe (33%)</td>
</tr>
</tbody>
</table>
Illusion”. Spoiler alert. In the video, six people are divided into three-person teams and the audience is asked to count how many times the team dressed in white passes the ball to one another. The answer is 16. However, what most students watching the video the first time are unaware of is that a gorilla walks through the center of the group beating its chest. However, once they know that the person dressed as a gorilla walks through the group, they will never miss that again; they are now aware of the gorilla. For those who have seen the video, there are a couple of other changes they likely missed that are pointed out at the end of the video. Instructors can use this video to have a discussion around how our brains pay attention to certain stimuli that we are consciously processing and how we are not always aware of hidden biases. Such biases are something we do not notice easily. However, once we are made aware of our biases, we can then make a conscious decision to adjust or change our behavior as needed.

We have also included other examples of videos that instructors might use. See Appendix C. Our aim with showing a video before discussing the classroom results is to exemplify that cognitive bias are not an intentional cognitive activity. After watching the “Monkey Business Illusion” video, we have found students receptive to the classroom discussion regarding the exercise. We then present a minilecture based on the research in the section on “Gender Bias and Stereotyping” that we discussed in the literature review. If the time available for the exercise is limited, the video could be omitted or assigned outside of class, but the minilecture is important for getting students to engage in the debrief.

Step 5: Recording the students results (5–10 minutes).

Tally the results for both Parts I and II and fill in the matrices prepared in Step 2 by asking students (based on each of the four scenarios assigned) to raise their hand based on how they voted. Or, the instructor can collect the completed scenarios (which do not have the student’s names on the sheets) and tally up the results.

Debrief and discussion (25–30 minutes)

In our classes, as shown in Table 2, the Friend versus Foe vote by undergraduate students in Part I reflected no significant difference based on the gender of the fictitious partner each student was paired with. Although women tended to vote Friend slightly more often than men, more than 75% of both male and female students consistently voted Friend in Part I. As shown in Table 3, while the aggressive statement by the fictitious partner in Part II reduced the percentage of students voting Friend in all four cases, there are differences based on both the gender of the students and the gender of their fictitious partner in the scenario. During the debrief we do not generally focus on the reasons students had provide for their voting in Part I, but with more than 75% consistently voting Friend, some common responses have included “we did the same amount of work,” “I like to see the best in people,” and “I’d rather have some [money] than none.”

After presenting the aggregate results, put the students into teams to discuss their views on the activity and their reactions to the voting results of the class. In our classes, students had been working as teams all semester, so they generally felt more comfortable first sharing their views and opinions within their small group. A good way to get a conversation going both in the small groups and later with the entire class is to assign questions. Each group should be given three or four questions to discuss and told to develop a consensus answer for the group to share with the class. Groups can all be given the same questions or different questions can be assigned to different groups. When there are five or fewer groups, it would be hard to get the opinions for each group and different questions should be used—half of the groups are assigned one set of questions and the other half is assigned a different set of questions. Of course, in the latter case, the discussion of the groups’ responses will require more time. Possible questions to assign to the groups include the following.

Small-group (team) questions

1. What was the most interesting aspect of this activity and why?
2. Are any of you surprised by the results—the voting by other students? Why or why not?
3. How did you make the decision to vote Friend or Foe? Do you think it made any difference that your partner was a man or a woman?
4. Before this exercise how do you think stereotyping influenced your thoughts and behaviors? Has this activity changed your thinking in any way?

After each group has had some time to formulate responses to the questions, begin the debrief session by eliciting some of their responses. Instructors should get

1https://www.youtube.com/watch?v=IGQmdoK_ZfY
answers to the same question from different groups. We suggest using any remaining time to raise additional questions to the class as a whole, such as the following.

Class questions

(1) Do any of you think there was a “right” way for you to vote Friend or Foe?
(2) In a business context, how could you see unintentional or unconscious bias affecting organizational outcomes regarding recruitment, engagement, performance, or retention?
(3) What techniques could you use to recognize unconscious biases? How easy or difficult would that be to implement in your daily life? In an organization’s culture?
(4) In class today, we focused on gender stereotypes, but what other stereotypes can you imagine might be triggered by unconscious bias?

Small-group (team) debrief

Overall, we have found students interested and engaged in completing the exercise and during the discussion of the results for these scenarios. In our classes we found that this activity was able to uncover unconscious bias as illustrated by the positions students took toward their partner when gender was the only difference in the scenario. When asked “What was the most interesting aspect of this activity and why?” one undergraduate student noted that she found the results from Part II interesting because the male students appeared to be biased against Patricia (65% voted Foe) and the female students appeared to be biased in favor of Patrick (71% voted Friend). Another student noted how interesting it was that most students thought that they would vote Friend prior to the aggressive stance taken by their partner (the results from Part I). These differences created an opportunity to discuss stereotyping and unconscious bias. While the overall voting percentages were interesting to note, further discussions as to the motivations uncovered other interesting themes.

In response to the question, “Are any of you surprised by the results—the voting by other students? Why or why not?,” a theme that emerged was that male students who had been partnered with Patricia often conveyed (sometimes vigorously) that they did not trust her. One male student noted that he had written in Part II, “I do not trust you so I am 100% choosing Foe.” However, this lack of trustworthiness was generally not attributed to Patrick by the male students even if they voted foe.

We found that the third question, “How did you make the decision to vote Friend or Foe? Do you think it made any difference that your partner was a man or a woman?,” often creates a lively debate. While most students believe the gender of the assigned partner would not make a difference, when comparing the results from Part I to Part II, a difference is illustrated between the results for students partnered with Patrick versus students partnered with Patricia. One student noted that “usually when men are aggressive they are taking initiative; when women are aggressive they are called the ‘b’ word.” We found drawing content from the “Implications of Research” section into the discussion allows students to realize that their decision making could be unconsciously influenced.

When asked “Before this exercise how do you think stereotyping influenced your thoughts and behaviors? Has this activity changed your thinking in any way?,” many students reported that they had not previously considered how stereotyping might influence their thoughts and behaviors. In fact, many students commented that they believed that stereotyping was negative. However, drawing from the literature presented in the section “Gender Bias and Stereotyping,” students began to understand that stereotyping is a cognitive process that offers both benefits and downsides when processing information about the world around them. After debriefing the small-group questions, we open the discussion to the entire class.

Class questions debrief

One interesting issue arose in debriefing an MBA class when the class was asked “Do any of you think there was a ‘correct’ way for you to vote Friend or Foe?” Similar to our undergraduate students, the MBAs were engaged and interested in the results of the exercise, but one student stated that he believed he would have voted the same way regardless of the gender of the partner he was assigned. He had been assigned the scenario with Patricia and had voted Foe. This led us to collect additional data in two undergraduate classes where we removed gender from the scenario. The students were given a scenario identical to those listed in Appendix B, but the scenario was modified to be gender neutral. The wording was modified to included “your partner” instead of a gender-specific name. These two undergraduate classes totaled 61 students (48% female). See Table 6 for the results from Part I of the scenario and Table 7 for the results from Part II of the scenario.

The following week we shared the results of the gender-neutral experiment with the MBA students.
This led to a very thoughtful discussion as they considered this new information. The students acknowledged that in the gender-specific cases men were more likely to respond negatively to Patricia than when the gender of the other contestant was unknown. The student who had expressed the opinion that he would have voted the same way regardless of gender commented that maybe the gender of this partner has influenced his decision making.

Other questions we asked included “In class today, we focused on gender stereotypes, but what other stereotypes can you imagine might be activated by unconscious bias?” Because stereotypes often influence beliefs about the characteristics, attributes, and behaviors of certain groups, such as minority status (Nguyen & Ryan, 2008) or age (North & Fiske, 2012), this question allows for students to draw conclusions from this exercise and apply it to other stereotypes that might be affected by biases. Students generally mention ethnicity and age.

The next question we ask is, “In a business context, how could you see unintentional or unconscious bias affecting organizational outcomes?” In general, the students discuss areas of recruitment, performance, or retention. After the discussion, we cover the findings in the “Implications of Stereotyping” from the literature review here.

Before we ask the final question, we cover the materials in the “Biases Are Malleable” section. This allows the students to understand that biases are malleable and that there are ways in which the students could learn different mental associations. We then ask the class a three-part question, “What techniques could you use to recognize unconscious biases? How easy or difficult would that be to implement in your daily life? In an organization’s culture?” Most students acknowledged that now being aware of unconscious bias is a beginning to make adjustments in mental associations. Many of the students believed it would be difficult and required constant attention to their own thinking. Finally, students believed it would be extremely difficult to change an organization’s culture without full support from top leaders. At the end of this discussion, an interesting example to share (Noguchi, 2015) tells a story in which one company competing for technical talent made adjustments in its job postings, from language of “fast-paced” and “work hard, play hard” to terms like “support” and “teamwork.” This change increased its applicant pool by 30% and resulted in more women and minorities getting hired. With this example, an instructor can point out that by making adjustments to organizational practices, not only do individuals benefit but the organization also benefits from a larger and more diverse talent pool.

At the end of the class session, time should be reserved for the instructor to wrap up and summarize what the students have learned. Part of the wrap-up should involve reassuring the students that we all use stereotypes as a mental shortcut and everyone has some unconscious biases that arise from our culture, prior experiences, and a lack of information. However, it is important to note that stereotyping hinders the accuracy of social perception. Generalizations about people are often inaccurate and people in social groups are more likely to be different than the same (Banaji & Greenwald, 1994). Depending on the specific focus of the course in which the activity has been used, take-away points should be provided that allow students to leave with a clear understanding of the key ideas that they learned from this exercise. We concluded each session with a discussion about the implications such biases can have in the workplace. This included how an unconscious bias (i.e., gender bias) might unknowingly influence workplace outcomes regarding hiring practices, promotional practices, and performance reviews.

### Reinforcing learning objectives

Depending on the goals of the instructor, we have provided some additional instructor resources that could be assigned to students or used in the classroom discussion to reinforce the objectives of the exercise. Appendix A describes three reading assignments that an instructor might find useful. In Appendix C we describe and provide links to two videos and three websites that, based on our experience, other instructors may also find useful.

A reflection paper could be assigned to allow students to further consider the exercise. Questions to have the student consider might include: What insights had the students gained about gender bias? What examples of gender bias have they seen in their own
experiences? What strategies might they engage in to lower their own gender bias in their interactions with others in the classroom or in the workplace?

Student feedback

In using this exercise, 74 undergraduates rated how effectively the exercise met the learning objectives on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Their mean response was 4.2, indicating that they believed the exercise met the learning objectives.

From the graduate students, we collected qualitative feedback asking the question “What aspect of workplace behavior did this activity help you understand?” Most students identified ways in which this activity impacted their perceptions of workplace interactions, with comments such as “I liked how I didn’t realize my own biases” or “We all carry around biases that affect our decisions whether we realize it or not.” Other students connected to the activity from personal experience, with “I could relate to this activity. I have been in a similar situation.” However, there were a few students who did not believe they learned from this activity, with comments such as “this exercise didn’t seem that useful” or “I’m not sure what I learned from this one.” While feedback was overwhelmingly positive, it is important for an instructor to realize that not all students may be receptive to this activity.

Finally, an undergraduate male student stopped by the office of one of the instructors a few days after the activity was done in class. After reflecting on his own behavior during some of the team projects he had worked on in other courses, he realized that in one particular project he had completely discounted one woman’s contributions without any reason. In fact, even without reading her portion of the assignment, he excluded it and instead wrote that part with another male student. The team ended up with a B on the project, so he realized it wasn’t necessarily true that he and the other male student were delivering superior performance. As the discussion continued, he also thought of himself as a leader and realized how detrimental his actions had been to both the female team member and the team’s overall performance. Going forward he intended to strive to be aware of the unconscious biases he may have when working with others.

Conclusion

Stereotyping has its place. It is a useful tool for instilling some broad understanding about differences between people. Some cultures are more risk averse. Some cultures are more accepting of hierarchy. In some cultures, the expectations of women are very different than in other cultures. Having an understanding in the form of a stereotype may be a good starting place, but when it hardens into a judgment-laden (and often inaccurate) bias, there can be negative consequences, especially when that bias is unconscious.

This active learning activity can help students understand that unconscious bias exists and provide a forum to discuss how to improve their understanding of stereotypes and biases. This exercise provides an opportunity for students to be more aware of their own biases and understand ways in which biases might be uncovered as well as steps they can take to minimize the effects. Such understanding and action have clear potential to improve conditions in the workplace.

This activity can be used in a variety of business courses, such as courses on diversity, organizational behavior, international management, and human resource management. The exercise can be adjusted to focus on a wider variety of differences that can provoke disparate behavior due to biases, as suggested in the instructor questions described earlier. There are even some obvious extensions of this activity outside of a business school setting to courses in other disciplines, such as psychology, sociology, and international studies. With an exercise such as this that focuses on biases and stereotypes, caution must be exercised to avoid being judgmental or making any suggestion that there are appropriate or inappropriate belief systems (Amoroso, Loyd, & Hoobler, 2009).

This active learning activity can help students understand that unconscious bias exists and provide a forum to discuss how to improve their understanding of stereotypes and biases. Therein lies an opportunity for students to be more aware of their own biases and understand ways in which biases might be uncovered and steps taken to minimize the effects. Such understanding and action have clear potential to improve conditions in the workplace and to have a positive effect on firm performance.

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Appendix A

Recommendation for Readings

In a diversity class, we used a chapter from the course textbook that covered the topic of stereotypes and biases. For other courses, we would recommend one of the readings below or one that is similar in topic that the instructor would prefer to use in his or her course.

Option 1: Women “Take Care,” Men “Take Charge.” Stereotyping of U.S. Business Leaders Exposed marks the first in a series of studies Catalyst is undertaking to examine and address the most formidable barriers to women’s advancement in the workplace. “In the first of a groundbreaking series of studies that looks closely at specific barriers facing women in the workplace, Catalyst explores the obvious but unspoken – how gender-based stereotypes in business limit opportunities for women to advance in the workplace and achieve their potential” (Catalyst, 2005, p. 3).


Option 2: Diversity Matters. From the Executive Summary on page 1: Diversity matters because we increasingly live in a global world that has become deeply interconnected. It should come as no surprise that more diverse companies and institutions are achieving better performance. Most organizations, including McKinsey, have work to do in taking full advantage of the opportunity that a more diverse leadership team represents, and, in particular, more work to do on the talent pipeline: Attracting, developing, mentoring, sponsoring, and retaining the next generations of global leaders at all levels of the organization. Given the increasing returns that diversity is expected to bring, it is better to invest now, as winners will pull further ahead and laggards will fall further behind.


Option 3: Heilman (2001) article called “Description and Prescription: How Gender Stereotypes Prevent Women’s Ascent Up the Organizational Ladder.” Abstract from the article: This review article posits that the scarcity of women at the upper levels of organizations is a consequence of gender bias in evaluations. It is proposed that gender stereotypes and the expectations they produce about both what women are like (descriptive) and how they should behave (prescriptive) can result in devaluation of their performance, denial of credit to them for their successes, or their penalization for being competent. The processes giving rise to these outcomes are explored, and the procedures that are likely to encourage them are identified. Because of gender bias and the way in which it influences evaluations in work settings, it is argued that being competent does not ensure that a woman will advance to the same organizational level as an equivalently performing man.

Appendix B

Case Handout Instructions

Part I

Are You a Friend or Foe?

Imagine that you are on the game show Friend or Foe? On this game show you work with a partner to grow a pot of money by answering questions as a team. After the question portion of the game, you and your partner will then need to decide how you will split the money between you by voting either Friend or Foe.

You have been randomly assigned a partner, <insert name here>, someone that you never met before and will never meet again. In the first half of the show, you worked together answering questions in order to accumulate as much money possible. Throughout the game, you have both correctly answered the same number of questions and together you have accumulated a total of $5,000.

You now have to decide how the money is going to be split. You will have a few minutes to talk to your partner and decide if <insert pronoun here (he or she)> is a Friend or Foe and whether or not you can trust <insert pronoun here (him or her)>. You will decide your answer in secret and then your answers will both be disclosed at the same time.

Both you and <insert name here> have 2 choices, you could either vote Friend or Foe. If you both vote Friend, then you will split the funds evenly. If one of you votes Foe, while the other votes Friend, the person voting Foe will walk away with all of the money and the person who choose Friend will walk away with nothing. If you both vote Foe, then both of you will walk away with nothing.

Here is the payout schedule:

Before you speak with <insert name here>, what would your choice be (Friend or Foe)? Briefly explain why you made your choice (you can change your mind after hearing what <insert name here> has to say):

Part II

You and <insert name here> will have a few minutes to talk through how you plan to vote and why you will choose that option.

<Insert name here> goes first in making <insert pronoun here (his or her) case. Here is <insert pronoun here (his or her)> statement:
I am going to pick Foe, and either you pick Friend and trust me to split the money with you after the show, or you can pick Foe and we both walk away with nothing. I am 100% picking Foe. I am just being honest and you can trust me when I tell you I will split the money with you.

Briefly describe your response to <insert name here>:
Please select your response. <Insert name here> will not see this choice (place a check mark in one of the boxes below)

Friend    Foe

Appendix C

Additional Teaching Resources

Recommendation for Videos

**Video #1**: TED talk “How to avoid gender stereotypes” by Eleanor Tabi Haller-Jordan.

Corporations across Europe share the same problem: a dramatic gender gap in leadership. Although the size of this gap varies from country to country, men far outnumber women in senior business leadership. What makes the most senior positions in business so inaccessible to women—even in countries where there is considerable government and social support for gender equality? Senior women leaders across Western Europe tell us that gender stereotyping is an important barrier to consider; and our research supports it. While solutions are often sought through policy and engineered approaches, the real barriers to change may be much more personal and insidious. The companies that focus on tackling deep-seated bias and making their organizations safer for mavericks—who are less concerned with fitting in and more on making a contribution—may be the most effective in fixing the gender gap and, more critically, in business. (abstract from TED website) [https://www.youtube.com/watch?v=9ZFNsJ0-aco](https://www.youtube.com/watch?v=9ZFNsJ0-aco) (10:00 minutes)

**Video #2**: Women Endure Surprising Bias in the Workplace

ABC News Video that reports on a Yale University hiring experiment in which the job candidates are actors and their resumes and the responses to the interview questions are identical. This is an example when interviewing for a job, men and women might behave the same but get evaluated differently. [http://abcnews.go.com/WNT/video/women-endure-surprising-bias-workplace-21186867](http://abcnews.go.com/WNT/video/women-endure-surprising-bias-workplace-21186867) (2:30 minutes)

**Website #1**: Project Implicit is a website where instructors can have students take an Implicit Association Test. [https://implicit.harvard.edu/implicit/takeatest.html](https://implicit.harvard.edu/implicit/takeatest.html)

Following is the description from the website. Project Implicit is a nonprofit organization and international collaboration between researchers who are interested in implicit social cognition—thoughts and feelings outside of conscious awareness and control. The goal of the organization is to educate the public about hidden biases and to provide a “virtual laboratory” for collecting data on the Internet.

Project Implicit was founded in 1998 by three scientists—Tony Greenwald (University of Washington), Mahzarin Banaji (Harvard University), and Brian Nosek (University of Virginia). Project Implicit Mental Health launched in 2011, led by Bethany Teachman and Matt Nock. Project Implicit also provides consulting, education, and training services on implicit bias, diversity and inclusion, leadership, applying science to practice, and innovation.

**Website #2**: Managing Unconscious Bias at Facebook, [https://managingbias.fb.com](https://managingbias.fb.com)

“At Facebook, we believe that understanding and managing unconscious bias can help us build stronger, more diverse and inclusive organizations. These videos are designed to help us recognize our biases so we can reduce their negative effects in the workplace. Surfacing and countering unconscious bias is an essential step towards becoming the people and companies we want to be.” (Summary posted on the website)

The website includes six videos on topics such as (1) Introductions and First Impressions (15:38 minutes), (2) Stereotypes and Performance Bias (16:21 minutes), (3) Performance Attribution Bias (10:29 minutes), (4) Competence/Likeability Tradeoff Bias (7:16 minutes), (5) Maternal Bias (6:53 minutes), Business case for Diversity & Inclusion and What You Can Do (7:00 minutes).

**Website #3**: Unconscious Bias @ Work | Google Ventures [https://www.youtube.com/watch?v=nLjFTHTgEVU](https://www.youtube.com/watch?v=nLjFTHTgEVU)

“Unconscious biases are created and reinforced by our environments and experiences. Our mind is constantly processing information, oftentimes without our conscious awareness. When we are moving fast or lack all the data, our unconscious biases fill in the gaps, influencing everything from product decisions to our interactions with coworkers. There is a growing body of research—led by scientists at Google—surrounding unconscious bias and how we can prevent it from negatively impacting our decision making.” (Summary posted on the website) (1 hour talk)