Altering Frequency Estimates of Hindsight Bias in Others Via Stereotyping: Asians as a Model Minority

The role racial stereotypes play in influencing attributions of hindsight bias in others was investigated. White college students made frequency estimates of hindsight bias for 1 of 3 different ethnic groups—Asians, Blacks, and Whites—with regard to a sporting event. The bias was estimated to be less for Asians than for both Whites and Blacks, with no significant difference between the latter two groups. Consistent with earlier research, this outcome supported the notion of positive stereotyping being linked to Asians; the negative stereotyping ascribed to Blacks was unsubstantiated. Future research should be aimed at the social psychology of hindsight bias, because overestimating its presence in others may lead us to minimize its prominence in our everyday thinking.

From the social cognitive perspective, stereotypes are beliefs we have about individuals as members of a group (Macrae, Stangor, & Hewstone, 1992). They are cognitive structures that have a major impact on perception, attention, and memory and facilitate the information processing involved in person perception, which results in positive or negative attributes (Dovidio, Evans, & Tyler, 1986).

To accommodate all the information about the many people we encounter every day, we categorize the information, which simplifies our processing task. Stereotyping is one way we do that. This social categorization can be derived from people's desire to evaluate themselves positively; therefore, they are motivated to see their own group as different from and perhaps better than other social groups (Hamilton & Sherman, 1994).

Stereotyping is a cognitive process that seems to happen automatically (Dovidio et al., 1986). Prior exposure to stimuli, such as people, ideas, or even mere words, influences the perceiver's interpretation of new information. Dovidio et al. (1986) used a priming technique to examine the role of stereotypes in social cognition. They found that when White participants were presented a single word, either a “Black” or “White” prime, they altered their responding to stereotypic traits pertaining to social judgments of Black and White individuals.

Several researchers (Chan, 1991; Oyserman & Sakamoto, 1997; Sue & Kitano, 1973) have reported that Asian Americans are generally seen as being smart, intelligent, competitive, and diligent. Other positive

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attributes include studious, hard working, modest, and quiet. They are portrayed positively as the "model minority."

Black stereotypes are more negative than stereotypes linked to Asians and Whites. On the other hand, Blacks are described more negatively than Asians (Sears, Citrin, & Laar, 1995). Blacks are often considered violent, lazy, loud, and welfare-dependent (Sigelman & Tuch, 1997). Many believe that Blacks are more aggressive and outgoing than Whites and Asians (Rushton, 1999). These positive or negative stereotypes may bias judgments about other social groups on the basis of race.

Another identified form of bias is the hindsight consequence, the "knew-it-all-along" effect. This bias is characterized by individuals who exaggerate what could have been predicted in foresight. For example, after the most recent presidential election, individuals were heard proclaiming that "they knew" that George W. Bush would make it to the White House. This tendency to believe that an individual would have predicted Bush's victory is an example of hindsight bias. Synodinos (1986) used a 1982 gubernatorial election to show that the postelection judgment of individuals for the winner was higher than those made prior to the election. Once individuals know an outcome of an event, they tend to try to explain and make sense of the situation. "Making sense" out of being told the outcome is so natural that individuals may be unaware that the outcome knowledge has biased their judgment (Fischhoff, 1977). Hindsight bias, much like stereotypes, seems to happen automatically.

Researchers have examined how stereotyping strengthens or mitigates hindsight bias. Carli (1999) found that for either a positive outcome (marriage) or negative outcome (rape), hindsight bias was increased by the addition of stereotypically antecedent details relevant to each outcome but not actually in the story. Bodenhausen (1990) utilized a criminal assault or sexual harassment/molestation scenario and found that individuals exhibited hindsight bias for judgments about a nonstereotypic but not a stereotypic offender. Evidently, in the latter instance, the outcome information contradicted the stereotype associated with the offender. These studies draw attention to the role of stereotyping in the production of hindsight bias and to other aspects of a social nature important for the biases of stereotyping and hindsight.

Our decision-making and social strategies may be influenced greatly by how well we judge others' attitudes and beliefs. For example, it seems likely that many of us avoid others who engage in extensive hindsight bias when they speak about a variety of daily outcomes ranging from sports scores to stock market prices as if they "knew-it-all-along" (Moodie-Dyer, Horn, & Wright 1999).

Related to our judgments of others is the notion of self-serving bias. Feldman (1995) found that people rated themselves higher on positive qualities, such as being responsible, interesting, and bright, but significantly lower on negative aspects, such as being cruel and snobbish. When making judgments about others, the negative qualities were much higher. We overestimate the accuracy of our judgments and underestimate the degree to which others share our skills and positive attributes. Negative behaviors seem to be more prevalent in others than in us. Thus individuals should be more likely to claim that they exhibit hindsight bias less often than others.

Self-serving bias may lead us to believe that others exhibit both hindsight bias and stereotyping more frequently than we do. In support of this view, Hass, Katz, Rizzo, Bailey, and Moore (1992) found that some individuals shield their self-image by claiming they are not as biased as others.

Moodie-Dyer et al. (1999) investigated the role of positive/negative racial stereotypes for judgments about hindsight bias frequency in others on the basis of race. White college participants were read a definition of hindsight bias and given an example of baseball player Mark McGwire displaying the bias. This study was conducted immediately after McGwire's historic home-run feat. Students made judgments about how often they thought that Asian, Black, or White groups exhibit hindsight bias while watching a sporting event.

Participants were cued about race on the basis of a single-word label, which should be subtler than the use of stronger cues such as making judgments about the characteristics of the specific race. This approach allowed for the detection of stereotyping in White individuals who view themselves as being essentially non-prejudiced (Hass et al., 1992). The participants also made judgments about how much these targeted racial groups would consider Mark McGwire as likeable or conceited on the basis of his hindsight bias exclamations that he knew he would hit the winning home run.

Moodie-Dyer et al. (1999) anticipated that hindsight bias frequency judgments would be lower for Asians and higher for Blacks when compared to Whites. This expectation was based on the positive stereotypes linked to Asians and the negative stereotypes associated with Blacks.

The results showed that hindsight bias frequency was thought to be greater for Whites than for Asian and Blacks, with no significant difference between the latter groups. This finding, however, occurred with women but not with men. For the likeability and con-
ceit measures there was no interaction with gender. These findings were consistent with the notion that the positive stereotype of Asians being a model minority resulted in Asians being seen as less likely to engage in hindsight bias. Contrary to the predictions, the estimates for Black populations were the same as for Asians and less than for Whites.

Nearly every participant responded to an open-ended question for Blacks but not for the other racial groupings. These responses were mainly of a racial nature such as "every race has the same opinions" and "color doesn't matter in relation to personality and talent." It is possible that the participants, particularly the women, were exhibiting compensatory bias in their hindsight frequency ratings. They may have attempted to deal with the emotional aspects of the stereotypes by hiding their views or compensating for them, which could have accounted for the difference between Whites and Blacks.

The current study further examined the role of stereotyping in making hindsight bias frequency judgments about other ethnic groups by altering procedures from the earlier work by Moodie-Dyer et al. (1999) in three ways. First, the athlete was changed from a specific individual (Mark McGwire) to a more generic one: a baseball player. Because the earlier findings noted for gender may be due to the fame and popularity of Mark McGwire, use of a more generic baseball player would thus extend the generality of the earlier study. Second, college students were told that their responses should be based on the views of their peers rather than on their own beliefs. This method was designed to minimize the possible role of compensatory bias. And third, an assessment of the participants' understanding of hindsight bias was included. If participants failed to grasp the notion of hindsight bias, then they could not be expected to make reliable judgments about its frequency in other racial groups.

Like the earlier study by Moodie-Dyer et al. (1999), a brief survey instrument using only a single-item measure of the key dependent variable, hindsight bias frequency, was used because of time constraints. Because this approach is not as convincing as a multiple-item approach, it is important to be able to assess the reliability of the earlier findings with the single-item measure.

The investigation was designed primarily to replicate the earlier supportive findings of a positive stereotype being associated with Asians when compared to both White and Black individuals. In line with our initial belief that Blacks would be viewed negatively, we hoped to minimize the role of compensatory bias and demonstrate differences in participants' judgments when comparing Blacks and Whites. Such an outcome would support the notion that the positive/negative stereotypes attributed to the targeted ethnic group influence judgments of hindsight bias frequency.

Method

Participants

Forty-seven White students (M = 21.65, SD = 4.47) from introductory physical health and education classes participated in this study. A 2 X 3 between-subjects factorial design was used; the first factor was gender and the second factor was the participants' judgments about one of three different racial groups: Asian, Black, and White. Individuals were assigned to the various conditions in a counterbalanced order by gender and the targeted racial group, which resulted in nearly equal proportion of each gender for the targeted racial groups: Asians (8 men, 9 women), Blacks (6 men, 9 women), and Whites (8 men, 7 women). On the basis of self-reported race, non-White participants, fewer than 3% of total participants, were excluded from the data analysis. All participants were unpaid volunteers and received no extra course credit for participation. Each participant signed a consent form to participate.

Materials

The participants completed the questionnaire anonymously but were asked to provide information about gender, age, and ethnicity. The written instructions for completing the questionnaire included the underlined statements, "This study is not concerned with your personal views," and "It regards the views of your peers at this University." A newspaper article was cited that described a baseball player's display of hindsight bias after hitting a winning home run. The key words included in the story were, "After the game, the baseball player sat with his bat beside him and said, 'I knew tonight would be the night I would save the game.'"

Hindsight bias was then explained in the following way:

It is probably unlikely that the baseball player was certain that he would hit the home run before the game as he was after the game. After hitting the home run, he tended to exaggerate the extent to which he would have predicted it. This tendency of the baseball player to overestimate the extent to which he would hit the home run has been labeled hindsight bias or the "knew-it-all-along" effect.

After reading the information about hindsight bias, the participants answered five questions. First, participants rated their understanding of the hindsight bias concept on a scale from 1 (low) to 9 (high). Using the same Likert scale with different anchors, 1 (never) to 9 (always), hindsight bias frequency was
assessed by asking how often their peers expect Asians/Blacks/Whites to show hindsight bias when watching sporting events. Two other questions measured participants’ perceptions of the baseball player’s likeability (1 = likeable, 9 = unlikable) and conceit (1 = not conceited, 9 = conceited) from the perspective of Asians/Blacks/Whites. The last question was open-ended and allowed participants to list any characteristics or attributes about the targeted racial group.

**Procedure**

The researcher presented this study to three physical education classes during class time. The researcher first handed out consent forms for the participants to complete if they wished to participate. Then, the three versions of the questionnaire instructing the participants to make judgments about one of the three targeted racial groups (Asians/Blacks/Whites) were distributed in a counterbalanced order to approximate an equal number of men and women judging each race.

**Results**

Initially the dependent variables of understanding the concept of hindsight bias, hindsight bias frequency, and likeability and conceit were subjected to a $2 \times 3$ analysis of variance (ANOVA) with the factors being, respectively, gender of the participant and ethnicity of the target group. None of these analyses ($p$ values < .05) revealed significant effects for gender, so the factor was excluded from any further consideration.

Participants were first asked to rate their understanding of the hindsight bias concept. A one-way ANOVA on participants’ understanding of the concept showed that there were no significant differences ($F < 1$) for the targeted group of Asians ($M = 7.29$, $SD = 0.68$), Blacks ($M = 7.00$, $SD = 0.40$), and Whites ($M = 7.15$, $SD = 0.39$). The level of these means, ranging from 7.00 to 7.29, revealed their understanding to be moderately high.

In support of our expectations for the measure of hindsight bias frequency assertions, a significant difference was found for the targeted racial groups, $F(2, 47) = 13.47$, $p < .01$. Post hoc comparisons utilizing the Tukey honestly significant difference test showed that participants attributed significantly lowered hindsight bias frequency to Asians ($M = 4.06$, $SD = 1.52$) than to Whites ($M = 5.93$, $SD = 1.22$) and Blacks ($M = 6.07$, $SD = 0.96$), $p$ values < .001. No significant difference was found when comparing Blacks and Whites, $p > .05$.

No significant differences were found for the measures of likeability and conceit, $F$ values < 1. For likeability, the means for Asians, Blacks, and Whites, respectively, were 4.82 ($SD = 1.51$), 5.00 ($SD = 1.81$), and 4.80 ($SD = 1.61$). For conceit, the means were as follows: Asians, 5.29 ($SD = 1.26$); Blacks, 5.67 ($SD = 1.80$); and Whites, 6.00 ($SD = 1.60$). Because participants’ judgments of hindsight bias frequency occurred before these judgments, they might have altered their likeability and conceit assertions. Although both of these measures were significantly related to one another, $r = .56$, $p < .01$, neither was linked to hindsight bias frequency, $p$ values > .05.

Few respondents chose to answer the open-ended question about their specific targeted racial group. Thus this outcome did not allow us the opportunity to examine the nature of their answers for the role of compensatory bias.

**Discussion**

In line with the earlier findings by Moodie-Dyer et al. (1999), White college students perceived hindsight bias frequency to be significantly lower for Asians when compared to Whites. Moodie-Dyer et al. (1999) found that the estimates for Asians and Blacks were similar; in the present study, however, frequency of hindsight bias was judged to be lower for Asians than Blacks. Contrary to our expectations, no significant difference was found for the White-to-Black comparison. There was no evidence that these outcomes were related to the gender of the participants. Also, we failed to find any significant differences for the measures of likeability, conceit, and understanding of the hindsight bias concept. Perhaps a better method to assess participants’ understanding of hindsight bias would be for them to describe the bias in their own words or to apply the concept to a new situation.

Earlier, Moodie-Dyer et al. (1999) found that their difference in hindsight bias frequency judgment for the different racial groups was linked primarily to the women. That was not the case in the current study, as there was no evidence that participant’s gender was a factor. However, this outcome might have been due to procedural differences between the two studies, including attributing hindsight bias for a generic baseball player rather than for a famous one, adopting the perspective of peers, or the time of testing. Moodie-Dyer et al. (1999) conducted their study right after Mark McGwire broke the home run record. Informally, many students, including women, commented that they watched Cardinal games during the latter stages of McGwire’s pursuit of the record.

The belief that Asians would show less hindsight bias than the other target groups supports the stereotypic view that Asians are a model minority and provides an important replication using a simple word label to cue race and the single-item methodology. Whereas the earlier outcome of Moodie-Dyer et al.
Further investigations should be directed at expanding the network of factors related to hindsight bias frequency, determining whether individual differences in views toward racial groups is a factor, and perhaps using a more focused rather than the global or vague event such as watching sporting events. Conceivably, providing participants with a scenario with more specific details may result in even greater differences in their assertions.

The current findings for hindsight bias frequency are qualified by a number of issues. First, we did not directly assess positive/negative stereotypes linked to the different ethnic groups. Future research should assess the specific contents of the stereotypes prior to the participants' judgments about hindsight bias frequency. A second issue is whether compensatory bias plays a significant role in making judgments about Blacks. We attempted to minimize compensatory bias by having college students make judgments about their peers rather than themselves. We thought the use of a single-word descriptor for race would be subtle enough to trigger racial stereotyping, but it is possible the cue was a potent one when the target group involved Blacks. Hence the demand characteristics may have produced compensatory bias. But, unlike the earlier study by Moodie-Dyer et al. (1999), participants rarely responded to the open-ended question regarding the target group. If they did, their statements did not suggest that compensatory bias was a factor. Further research to examine the role of compensatory bias via an experimental manipulation would be beneficial.

Despite contrary evidence presented by Brigham and Wasserman (1999), who showed the importance of race for hindsight judgments, participants' assertions of no hindsight bias differences between Whites and Blacks may be accurate. First, Sigelman and Tuch (1997) argue that Whites' negative stereotypes of Blacks have lessened today as compared to previous decades. Second, the participants in our study were all college students. Pious and Williams (1995) found that noncollege participants were almost twice as likely to endorse racial stereotypes. Bodenhausen (1990) noted the possibility that his earlier findings may not be naturalistic due to the university setting for the study. Third, this Midwest university is not as diverse as some areas; the entire minority population of the university is 3%, thereby providing limited contact between White college students and minorities.

In conclusion, focusing on hindsight bias frequency judgments draws attention to the social psychology of hindsight bias. In general, the social psychologist is concerned with how we think about ourselves and influence one another. If we underestimate the frequency of hindsight bias in ourselves and overestimate it in others, what are the possible pernicious social and personal consequences? Others' pronouncements about seemingly obvious outcomes may be viewed positively or negatively when considering the expected baseline level of hindsight bias on the basis of ethnicity. Frequency of hindsight bias judgments may inadvertently act to reinforce or to maintain the stereotypes associated with ethnicity.

References


