Racial and Mental Illness Stereotypes and Discrimination: An Identity-Based Analysis of the Virginia Tech and Columbine Shootings

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The Virginia Tech and Columbine High shootings are 2 of the deadliest school massacres in the United States. The present study investigates in a nationally representative sample how White Americans' causal attributions of these shooting moderate their attitudes toward the shooter's race. White Americans shown a vignette based on the Virginia Tech shooting were more likely to espouse negative beliefs about Korean American men and distance themselves from this group the more they believed that the shooter's race caused the shooting. Among those who were shown a vignette based on the Columbine High shooting, believing that mental illness caused the shooting was associated with weaker negative beliefs about White American men. White Americans in a third condition who were given the Virginia Tech vignette and prompted to subtype the shooter according to his race were less likely to possess negative beliefs about Korean American men the more they believed that mental illness caused the shooting. There was no evidence for the ultimate attribution error. Theoretical accounts based on the stereotype and in-group–out-group bias literature are presented. The current findings have important implications for media depictions of minority group behavior and intergroup relations.

Keywords: Asian Americans, stereotypes, discrimination, exemplar, school shootings

In 2007, Seung-Hui Cho, a Korean American student from Virginia Tech killed 32 people and wounded 25 others before committing suicide. Proclaimed at that time as the deadliest school shooting in American history, the shooting reopened wounds inflicted by the Columbine High School massacre in 1999. Two White American students, Eric Harris and Dylan Klebold, went on a shooting rampage that left 13 dead and 21 injured before killing themselves. The striking violence in the Virginia Tech shooting captured the attention of the public, policymakers, and the mass media. Although Cho was similar to the Columbine shooters in many aspects (e.g., psychological problems, violent tendencies, and felt socially marginalized), he was depicted in the media as vengeful, morbid, and bitter (e.g., Dunham, 2007; Dunn & Balogh, 2007) whereas Harris and Klebold were portrayed as high school outcasts and victims of bullying who were harassed into retaliation (e.g., Adams & Russakoff, 1999; Cohen, 1999). The prominent visibility of Cho raises the question of whether discriminatory attitudes toward Korean Americans deepened after the event.

The current research leverages the combination of the Virginia Tech and Columbine shootings to investigate how United States majority group members (i.e., White Americans) attribute the cause of an extremely violent event to salient characteristics based on in-group versus out-group membership status, and how these attributions influence intergroup evaluations. It has been proposed that people will attribute undesirable out-group behaviors to internal rather than external characteristics, and will not recognize certain traits as salient in explaining a negative event if these traits are shared by their in-group members (Pettigrew, 1979). The current research specifically examines White Americans' attributions of the shootings to race and mental illness, and how these attributions interact with the shooter's race to influence beliefs about each race and intentions to socialize with each race. Although numerous studies have examined intergroup attributions (e.g., Chatman & von Hippel, 2001; Doosje & Branscombe, 2003), to our knowledge, no one has investigated the moderating role of causal attributions in interracial evaluations. Our focus on attributions of an Asian out-group member's adverse behavior also contributes to the literature on interracial evaluations that has focused largely on the Black–White division. In addition, we study actual events that capture the complexity of social perception in the real-world where potential bases for categorizing a social target (e.g., race and mental illness) tend to coexist (Bodenhausen & Peery, 2009).

Intergroup Attributional Bias

The human mind is designed to automatically perceive individuals based on their racial features (Fiske & Neuberg, 1990; Hewstone, Hantzi, & Johnston, 1991). Perceiving exemplars based on racial in-group/out-group membership can result in the formation of causal attributions that favor one's in-group. According to Pettigrew (1979), people tend to attribute positive out-group behaviors to external forces and negative out-group behaviors to internal characteristics of out-group members or even group membership per se; conversely, they tend to attribute positive in-group

behaviors to internal characteristics of in-group members or group membership and negative in-group behaviors to external forces. This pattern of attributions is known as the "ultimate attribution error (UAE)," and is said to maintain in-group favoritism and out-group stereotyping and prejudice (Pettigrew, 1979). Although the UAE has received some empirical support (Duncan, 1976; Morris & Peng, 1994; Taylor & Jaggi, 1974), overall evidence for both in-group favoring and out-group derogating attributions has been limited (Hewstone, 1990; Khan & Liu, 2008).

The present research investigates whether White Americans would demonstrate the UAE in forming attributions about the Virginia Tech and Columbine shootings. We test whether White Americans would attribute the shooting to race to a greater extent when the shooter is Korean than when the shooter is White. Because people with mental illness are commonly stereotyped in society as dangerous, violent, and deviant (Phelan & Link, 1998; Yang, Wonpat-Borja, Opler, & Corcoran, 2010), mental illness would constitute an external factor that could be perceived as a cause for the shooting behavior. Hence, we also test the prediction that White Americans would attribute the shooting (a negative event) to mental illness (an external cause other than race) to a greater extent when the shooter is White (in-group) than when the shooter is Korean (out-group).

Racial Exemplars and Interracial Evaluations

Research also suggests that people's evaluation of an individual's behavior may generalize to their evaluation of the individual's race; the individual becomes an exemplar that forms a reference point for subsequent racial judgments (exemplar effect; Smith & Zarate, 1992). For instance, exposure to negative behavior by Black exemplars (e.g., violence) has been shown to increase prejudice against Black Americans (e.g., minimize subsequent interpersonal contact, Henderson-King & Nisbett, 1996; and reduce policy support for Blacks, Johnson, Olivio, Gibson, Reed, & Ashburn-Nardo, 2009). In addition, the exemplar effect is stronger when the exemplar is an out-group (vs. in-group) member (Henderson-King & Nisbett, 1996). People tend to perceive members from their out-group to be similar to each other, and focus more on category-defining traits and less on individuating traits (out-group homogeneity effect; Judd & Park, 1988). Hence, out-group exemplars are seen as more prototypical of their group.

According to the exemplar effect, evaluation of the shooter's race would be more unfavorable when the shooter is an out-group versus in-group member. This difference might be accentuated by causal attributions that correspond to the UAE (Chatman & von Hippel, 2001). Attributing undesirable behavior to out-group membership provides sufficient justification for subsequent prejudice against the out-group (Crandall & Eshleman, 2003; Henderson-King & Nisbett, 1996). Thus, both literatures on the UAE and exemplar effect would predict stronger negative evaluations toward the shooter's race among White Americans exposed to the Korean-shooter than among White Americans exposed to the White-shooter.

Moderating Role of Causal Attributions

Given a lack of consistency in the literature concerning the UAE, we propose a more complex relationship between causal

attributions and interracial evaluations. Specifically, causal attributions (i.e., attributing the shooter's behavior to race and mental illness) and racial in-group/out-group status would interact to determine people's evaluations of and intentions to maintain social distance from their racial in-group and out-group.

Racial Attribution

Attributing the shooting to race justifies negative evaluations of the shooter's race (Crandall & Eshleman, 2003). Therefore, when White Americans make judgments about the cause of the shooting by the Korean-shooter, the more they believe his "Asian" race played a role in the shootings, the more they will generalize negative attitudes toward all Asian Americans. However, in-group favoring bias and tendency to observe variability within one's in-group (Quattrone & Jones, 1980) would entail that White Americans' beliefs about whether the shooter's "White" identity played a role in the shootings should not affect attitudes toward Whites in general. Hence, we hypothesize that White American respondents' attribution of the Korean-shooter's behavior to his racial background would be associated with stronger negative beliefs about Korean American men and greater intentions to maintain social distance from Korean American men, but White American respondents' attribution of the White-shooter's behavior to his racial background would not be related to either of these outcomes. Given that people's beliefs drive their behavioral intentions (Ajzen, 1991) and negative beliefs have been found to mediate social distance (Marie & Miles, 2008; Silton, Flannelly, Milstein, & Vaaler, 2011), we also predict that these negative attitudes would in turn increase intentions to maintain social distance from Korean American men.

Mental Illness Attribution

Compared with race, mental illness would be perceived as an external attribution for the shooting behavior because people tend to believe that mental illness causes individuals to behave in a dangerous and violent manner (Yang et al., 2010). As a result of these negative connotations about mental illness, people distinguish themselves from racial in-group members with mental illness ("they are not like us") to maintain a positive racial identity (Ottati, Bodenhausen, & Newman, 2005). Therefore, attributing the cause of the shooting to the shooter's mental illness should buffer racial in-group members from unfavorable evaluations. However, this buffering effect is attenuated when majority members already perceive the Korean-shooter as a racial out-group member who is "unlike the rest of us," and racial in-group identity is not at stake. Negative evaluations about the out-group are irrelevant to their self views (Ottati et al., 2005). Hence, we hypothesize that White American respondents' attribution of the White-shooter's behavior to his mental illness would be associated with weaker negative beliefs about White American men; on the other hand, White American respondents' attribution of the Korean-shooter's behavior to his mental illness would not affect their attitudes toward Korean American men. We do not make the same prediction regarding social distance because we expect that for majority members, social interaction and the necessity of interacting with the racial in-group are less malleable than beliefs about the in-group.

Intervention to Counter Negative Out-Group Evaluation

Finally, we test whether introducing an intervention would reduce negative evaluations regarding Korean American men. Specifically, we examine whether encouraging White American respondents to view the Korean-shooter as an unrepresentative or atypical member of his race would motivate them to adjust their attitudes toward Korean Americans. In general, information about the exemplar will be applied to the associated social group only if the exemplar is deemed representative of the group (Bless & Schwarz, 2010). People tend to exclude from their overall evaluations information about group exemplars that are viewed as atypical (Richards & Hewstone, 2001), especially when reasons that justify such subtyping are readily available (Kunda & Oleson, 1995). We investigate whether this subtyping intervention would mitigate the UAE and the exemplar effect. In addition, we examine whether it would interact with causal attributions to influence negative beliefs about Korean American men and intentions to maintain social distance from them.

In summary, using the context of the Virginia Tech and Columbine school shootings, we test the predictions based on the UAE and the exemplar effect, as well as the moderating role of racial and mental illness attribution on White American respondents' evaluations of and intentions to socialize with people from the shooter's race. We also examine whether negative beliefs mediate the relationship between causal attributions and social distance, depending on the vignette condition respondents are assigned to.

Method

Participants

An online survey was administered to 402 White American respondents by Knowledge Networks as part of the Time-Sharing Experiments for the Social Sciences (TESS) project. Respondents were drawn from a nationally representative panel of adults who are recruited via random-digit dialing and receive free Internet services in exchange for participating in surveys. Respondents were randomly assigned to one of three experimental conditions: (a) Korean-exemplar; (b) White-exemplar; and (c) Korean-exemplar plus subtyping prompt. Twenty-one respondents (7, 5, and 9 respondents from the three conditions, respectively) were removed from the analyses because of incomplete data, leaving a final sample of 381 respondents. Table 1 contains demographics of each condition.

Procedure and Materials

Respondents were administered our materials as part of a longer survey. They were first shown a vignette that was constructed based on a review of articles regarding the Columbine and Virginia Tech shootings in three national newspapers (the *Boston Globe*, *New York Times*, and *Washington Post*). The vignette delineated key circumstances shared by the two school shootings, and had two versions (Korean and White American) that were each focused on one shooter:

Seung-Hui Cho [Eric Harris] is a single, young male Korean American [White American]. He attends school in Virginia [Columbine, Colorado]. He enjoys playing video games and surfing the Internet. Beginning in 2005 [1997], Cho's [Harris'] communications became threatening to classmates. Although local authorities were notified of Cho's [Harris'] communications, nothing was done at first by these officials. After these initial incidents, his disruptive behaviors then came to the attention of local police. After police received information about Cho's [Harris'] deviant behaviors, he was court-ordered to enter a psychiatric counseling program. Cho [Harris] subsequently continued to take prescribed psychiatric medications. In 2007 [1999], armed with multiple guns that he had obtained, Cho [Harris] shot and killed over a dozen students in campus buildings. After police arrived at the scene, Cho [Harris] committed suicide by a self-inflicted gunshot wound inside the building.

Table 1

Demographic Data for the Korean-Exemplar, White-Exemplar, and Korean-Exemplar With Subtyping Conditions

Variable	Asian exemplar (n = 126)		White-exemplar (n = 131)		Asian exemplar/ subtyping (n = 124)	
	Frequency	%	Frequency	%	Frequency	%
Gender						
Male	65	51.6	70	53.4	61	49.2
Female	61	48.4	61	46.6	63	50.8
Household income ($)						
5,000–9,999	2	1.6	4	3.1	5	4.0
10,000–19,999	11	8.7	8	6.1	13	10.5
20,000–49,999	49	38.9	47	35.9	45	36.3
50,000–99,999	41	32.5	53	40.5	33	26.6
100,000–149,999	17	13.5	12	9.2	21	16.9
≥150,000	6	4.8	7	5.3	7	5.6
Highest education						
Less than high school	8	6.3	11	8.4	11	8.9
High school	42	33.3	45	34.4	44	35.5
Some college	39	31.0	39	29.8	30	24.2
Bachelor's degree or higher	37	29.4	36	27.5	39	31.5
Mean age (SD)	49.21 (16.07)		49.99 (15.98)		50.63 (16.30)	

Respondents in the Korean- and White-exemplar conditions read their respective vignettes. Those in the Korean-exemplar/subtyping condition read the vignette and then indicated on a scale from 1(*extremely atypical*) to 7(*extremely typical*) how typical they thought Cho is of most Korean American men. This question served as a subtyping prompt by raising the atypicality of the exemplar's shooting behavior to respondents' awareness (Bodenhausen, Schwarz, Bless, & Wanke, 1995). Following that, respondents from all three conditions completed, in order, the following scales.

Causal attributions. Respondents first indicated the extent to which the shooting was caused by the shooter's mental illness history. Then, they indicated the extent to which the shooting was caused by the shooter's racial background. These two items were rated on a 7-point Likert-type scale ($1 = $ *not at all*, $4 = $ *a moderate amount*, $7 = $ *a great deal*).

Negative beliefs. Next, respondents rated members of the shooter's race on two undesirable characteristics linked to violent events (Angermeyer & Matschinger, 1996, 2005). In particular, they rated two statements on a 4-point scale ($1 = $ *strongly disagree*, $4 = $ *strongly agree*): "In your opinion, [Korean/White-] American men are dangerous" and "In your opinion, [Korean/White-] American men are unpredictable." Ratings for these statements were summed to form an index of negative beliefs ($r = .87$), with higher scores implying stronger beliefs of dangerousness and unpredictability concerning men in the shooter's racial group.

Social distance. Respondents then completed two items adapted from the Social Distance Scale (Bogardus, 1925; Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999). They rated two statements on the same 4-point scale as for negative beliefs: "In your opinion, you would be willing to work closely with a [Korean/White-] American man" and "In your opinion, you would be willing to be close friends with a [Korean/White-] American man." Ratings for these statements were reverse-scored and summed to form an index of social distance ($r = .73$), with higher scores entailing greater intentions to maintain social distance from men belonging to the shooter's racial group.

Prior knowledge of event. Finally, respondents rated how much they had heard about the event before reading the vignette ($1 = $ *very little or no information*, $4 = $ *a great deal*) and how much they agreed that the vignette had accurately captured most of the important details of the actual shooting incident ($1 = $ *strongly disagree*, $4 = $ *strongly agree*). These two items were included in the analyses as covariates given that these shootings were real-life events and prior knowledge may influence how the events and shooters were perceived. After answering these questions, respon-

dents were debriefed online about the objectives and implications of the study.

Results

Difference in Causal Attributions Across Conditions

Before performing moderation analyses, we conducted one-way analyses of variance (ANOVA) and post hoc comparisons using the Tukey's honestly significant difference (HSD) test to determine whether causal attributions differed across the three conditions (see Table 2). There were no significant difference in mental illness attribution between the three conditions, $F(2, 378) = .90$, $p = .41$. However, a significant difference in racial attribution emerged, $F(2, 378) = 11.90$, $p < .001$, with post hoc comparisons indicating that respondents in the Korean-exemplar/subtyping condition exhibited lower racial attribution compared with the other two conditions. This provided support for the effectiveness of the subtyping manipulation in raising awareness of the atypicality of the shooter within his respective racial group, thus, reducing people's attribution of the Korean-shooter's behavior to race. Contrary to what the UAE would predict, respondents in the Korean-exemplar condition were not more likely to attribute the shooting to race than those in the White-exemplar condition.

Moderation of Negative Beliefs and Social Distance by Causal Attributions

Hierarchical multiple regression analyses were conducted on negative beliefs and social distance. As shown in Table 3, we regressed in Model 1, negative belief scores on the following covariates: age (mean-centered), gender where 1 represents female and 0 represents male, education level, household income, prior information about the events portrayed in the vignette, and perceived accuracy of the vignette. To test whether the exemplar effect would emerge after accounting for causal attribution, we added in Model 2 mean-centered racial and mental illness attribution scores, as well as two dummy variables representing the three conditions: Korean-exemplar condition where 1 represents Korean-exemplar condition and 0 represents White-exemplar and Korean-exemplar/subtyping conditions, and White-exemplar condition where 1 represents White-exemplar condition and 0 represents Korean-exemplar and Korean-exemplar/subtyping conditions. Finally, in Model 3, we added the interaction terms between each of the dummy variables and the causal attribution scores to investigate the moderating roles of mental illness and racial attri-

Table 2

Mean Scores and SDs of Causal Attributions for the Korean-Exemplar, White-Exemplar, and Korean-Exemplar With Subtyping Conditions

Variable	Asian exemplar		White-exemplar		Asian exemplar/ subtyping	
	Mean	SD	Mean	SD	Mean	SD
Mental illness attribution	5.96	1.17	5.93	1.23	5.77	1.30
Racial attribution	2.82[a]	1.69	3.01[a]	1.67	2.10[b]	1.30

Note. Means with different superscripts are significantly different from other means within the same row at $p < .005$.

Table 3
Linear Regression Model for Negative Beliefs

Variable and statistic	Model 1	Model 2	Model 3
Controls			
Age	.00	.00	−.01
Gender	.14**	.13***	.13***
Education	−.03	.00	.01
Income	−.03	−.04	−.05
Prior information	−.05	−.01	−.01
Perceived accuracy	.01	.02	.02
Predictors			
Racial attribution		.10*	.30***
Mental illness attribution		−.13**	−.17*
White-exemplar condition		.49****	.48****
Korean-exemplar condition		.01	−.03
White-exemplar × racial attribution			−.23***
Korean-exemplar × racial attribution			−.07
White-exemplar × mental illness attribution			−.02
Korean-exemplar × mental illness attribution			.14*
Adjusted R^2	.01	.28	.31
F (dfs)	1.66 (6, 374)	15.50 (10, 370)	13.35 (14, 366)

Note. Standardized betas are reported. Age, racial attribution, and mental illness attribution are mean-centered. Gender is dummy coded such that 1 represents female and 0 represents male. Korean-exemplar condition is dummy coded such that 1 represents the Korean-exemplar/no-subtyping condition and 0 represents the White-exemplar and Korean-exemplar/subtyping conditions. White-exemplar condition is dummy coded such that 1 represents the White-exemplar condition and 0 represents the Korean-exemplar/no-subtyping and Korean-exemplar/subtyping conditions (Model 2).
* $p < .05$. ** $p < .01$. *** $p < .005$. **** $p < .001$.

butions. Social distance scores (see Table 4) were regressed on the same predictors in the same hierarchical fashion.

Regression models for negative beliefs. Gender was a significant predictor of negative beliefs in all three models; in general, female (vs. male) respondents rated men from the shooter's race as

more dangerous and unpredictable. In addition, both mental illness and racial attributions were significant predictors of negative beliefs in Models 2 and 3. Whereas higher mental illness attribution scores were associated with weaker negative beliefs, higher racial attribution scores were associated with stronger negative beliefs.

Table 4
Linear Regression Model for Social Distance

Variable and statistic	Model 1	Model 2	Model 3
Controls			
Age	.04	.02	.02
Gender	.08	.09*	.09
Education	−.09	−.07	−.05
Income	−.09	−.07	−.09
Prior information	−.16	−.15***	−.12*
Perceived accuracy	−.07	−.04	−.05
Predictors			
Racial attribution		.29****	.57****
Mental illness attribution		−.10*	−.20*
White-exemplar condition		−.30****	−.33****
Korean-exemplar condition		−.03	−.07
White-exemplar × racial attribution			−.29****
Korean-exemplar × racial attribution			−.17*
White-exemplar × mental illness attribution			.15*
Korean-exemplar × mental illness attribution			.06
Adjusted R^2	.06	.20	.23
F (dfs)	5.27 (6, 374)	10.35 (10, 370)	8.99 (14, 366)

Note. Standardized betas are reported. Age, racial attribution, and mental illness attribution are mean-centered. Gender is dummy coded such that 1 represents female and 0 represents male. Korean-exemplar condition is dummy coded such that 1 represents the Korean-exemplar/no-subtyping condition and 0 represents the White-exemplar and Korean-exemplar/subtyping conditions. White-exemplar condition is dummy coded such that 1 represents the White-exemplar condition and 0 represents the Korean-exemplar/no-subtyping and Korean-exemplar/subtyping conditions (Model 2).
* $p < .05$. ** $p < .01$. *** $p < .005$. **** $p < .001$.

We also found in Models 2 and 3 that, contrary to the exemplar effect, being in the White-exemplar condition predicted stronger negative beliefs; White American men were deemed as more dangerous and unpredictable than Korean American men in the subtyped and nonsubtyped conditions. Although these effects were counter to our first set of hypotheses, support for our moderation hypotheses was obtained (see Table 3). Results indicated a significant White-exemplar condition by racial attribution interaction and Korean-exemplar condition by mental illness attribution interaction

We probed the nature of the White-exemplar condition by racial attribution interaction using simple slope analysis (Aiken & West, 1991), which assessed the significance of the regression coefficient for racial attribution when respondents were exposed to the White exemplar versus the two Korean exemplars. In line with our predictions, results showed that higher racial attribution was associated with stronger negative beliefs about Korean American men ($b = .30$, $t(366) = 3.15$, $p < .005$) in both the Korean-exemplar conditions (this relationship was significant within each of these two conditions). There was no significant association between racial attribution and negative beliefs about White American men ($b = -.08$, $t(366) = -1.13$, $p = .26$).

Simple slope analysis was also used to probe the Korean-exemplar condition by mental illness attribution interaction by examining the significance of the regression coefficient for mental illness attribution for respondents in the White-exemplar and Korean-exemplar conditions versus respondents in the Korean-exemplar condition. Results showed that higher mental illness attribution was associated with weaker negative beliefs in both the White-exemplar and Korean-exemplar/subtyping conditions ($b = -.17$, $t(366) = -2.31$, $p < .05$; this relationship was significant within each of these conditions). However, there was no significant association between mental illness attribution and negative beliefs in the Korean exemplar condition ($b = .09$, $t(366) = 1.14$, $p = .26$).

Regression models for social distance. Across Models 2 and 3 (see Table 4), prior knowledge of the shooting was a significant predictor of social distance such that hearing more about this event before the study was associated with lower intentions to maintain social distance from men from the shooter's race. Gender was a significant predictor in Model 2; compared with male respondents, female respondents had higher intentions to maintain social distance. Both mental illness and racial attributions were significant predictors of social distance in Models 2 and 3. Whereas higher mental illness attribution was associated with lower social distance, higher racial attribution was associated with greater social distance. Additionally, in Models 2 and 3, we found that being in the White-exemplar condition predicted lower social distance; respondents were more willing to befriend and work closely with White American men than Korean American men. Nevertheless, these effects were qualified by a significant White-exemplar condition by racial attribution interaction, a significant Korean-exemplar condition by racial attribution, as well as a significant White-exemplar condition by mental illness attribution interaction.

We explored the nature of the White-exemplar condition by racial attribution and Korean-exemplar condition by racial attribution interactions to examine our prediction that racial attribution would predict greater social distance in both the Korean-exemplar conditions but not the White-exemplar condition. Because both of

these interaction terms were significant, we examined the significance of the regression coefficient for racial attribution for respondents in each of the three conditions. Higher levels of racial attribution were associated with stronger intentions to keep social distance from Korean American men in the Korean-exemplar ($b = .26$, $t(117) = 2.89$, $p < .01$) and Korean-exemplar/subtyping conditions ($b = .47$, $t(115) = 6.06$, $p < .001$; this relationship was significant within each of these conditions). However, racial attribution was not associated with social distance in the White-exemplar condition ($b = .13$, $t(122) = 1.47$, $p = .15$).

We also examined the nature of the White-exemplar condition by mental illness attribution interaction by examining the significance of the regression coefficient for mental illness attribution for respondents in the White-exemplar condition versus respondents in both the Korean-exemplar conditions. Simple slope analyses indicated that higher mental illness attribution was associated with lower intentions to keep social distance from Korean American men ($b = -.20$, $t(366) = -2.52$, $p < .05$), but not White American men ($b = .06$, $t(366) = .74$, $p = .46$). Further examination of the data, however, revealed that the significant relationship between mental illness attribution and social distance in the Korean-exemplar conditions were driven mainly by the subtyping condition; the association between mental illness attribution and social distance in the Korean-exemplar condition alone was non-significant ($b = -.08$, $t(117) = -.84$, $p = .41$).

Moderated Mediation of Social Distance by Negative Beliefs

We examined whether negative beliefs would mediate the relationship between racial attribution and social distance among respondents in both the Korean-exemplar conditions but not the White-exemplar condition, as seen in Figure 1. A moderated mediation analysis with 5,000 bootstrapped samples was conducted using Model 8 of the PROCESS macro for SPSS (Chicago, IL) to test this (Hayes, 2013). Results from the analysis revealed a significant moderated mediation (indirect effect $= -.09$, $SE = .04$, with a bias-corrected 95% confidence interval (CI) that does not include 0 $[-.18, -.03]$). More specifically, among respondents in both of the Korean-exemplar conditions, negative beliefs mediated the effect of racial attribution on social distance (conditional indirect effect $= .06$, $SE = .02$, with a bias-corrected 95% CI that excludes 0 $[.03, .11]$). However, among respondents in the White-exemplar condition, negative beliefs did not mediate the effect of racial attribution on social distance (conditional indirect effect $= -.03$, $SE = .03$ with a bias-corrected 95% CI that contains 0 $[-.09, .01]$).

Additionally, we tested whether negative beliefs would mediate the relationship between mental illness attribution and social distance among respondents in the Korean-exemplar/subtyping condition but not the Korean-exemplar condition using the same moderated mediation analysis, as seen in Figure 1. As predicted, there was a significant moderated mediation (indirect effect $= -.22$, $SE = .09$, with a bias-corrected 95% CI that does not include 0 $[-.41, -.07]$). Among respondents in the Korean-exemplar/subtyping condition, negative beliefs mediated the effect of mental illness attribution on social distance (conditional indirect effect $= -.14$, $SE = .06$, with a bias-corrected 95% CI that excludes 0 $[-.27, -.05]$). However, among respondents in the
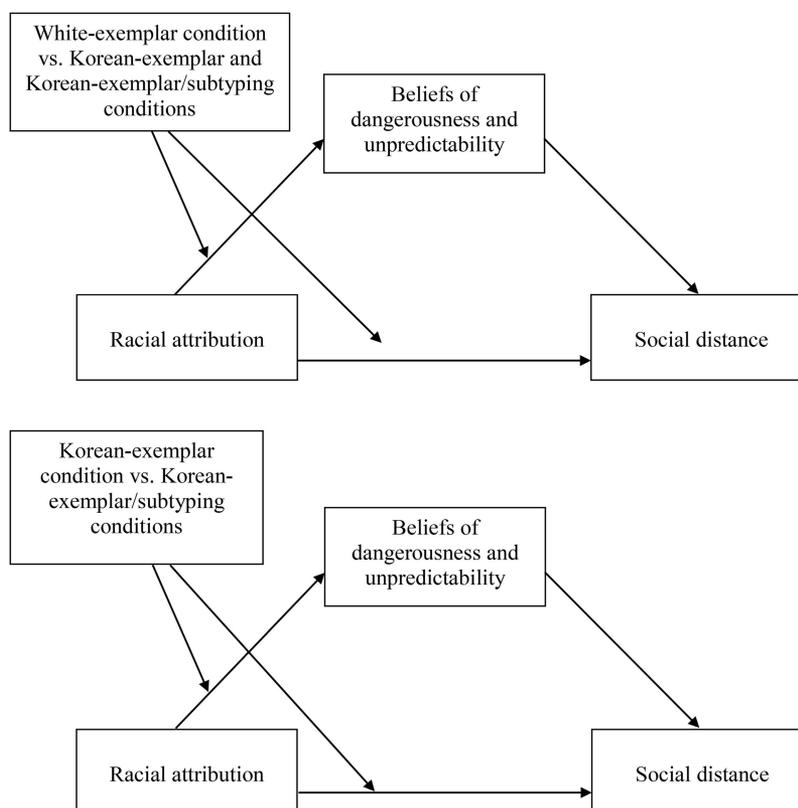
Figure 1. Conceptual diagram of proposed moderated mediation of social distance by negative beliefs.

Korean-exemplar condition, negative beliefs did not mediate the effect of mental illness attribution on social distance (conditional indirect effect = .08, *SE* = .06, with a bias-corrected 95% CI that contains 0 [−.04, .21]).

Discussion

The current research demonstrates that in the real-world context of school shootings, causal attributions of the shooter's behavior have significant impact on people's evaluations of the shooter's racial group. In particular, the extent to which people's attribution of the shooting to race influenced their judgment about the shooter's racial group was dependent on whether the shooter was an in-group or out-group racial member. In this case, White-respondents viewed members from the minority out-group as more dangerous and unpredictable the more they deemed race to be causal factor of the shooting. This interaction effect also applied to those who were exposed to the subtyping prompt; White-respondents who maintained strong beliefs that the Korean-shooter's racial background was responsible for the shooting despite the subtyping prompt were more likely to endorse negative beliefs about Korean American men. While linking Cho's actions to race might have provided sufficient justification for endorsing negative beliefs about Korean American men (Crandall & Eshleman, 2003; Henderson-King & Nisbett, 1996), racial attributions did not affect negative beliefs about White American men because of perceived heterogeneity within the racial in-group (Quattrone & Jones, 1980).

Additionally, we show that while mental illness attribution serves as inputs in the judgments made about racial in-group members, such information about the Korean-exemplar does not become utilized unless people are prompted explicitly to subtype the exemplar. Attributing the shooting to mental illness was associated with more favorable beliefs about White American men but not Korean American men. Whereas unfavorable information concerning the Korean-shooter did not pose any threat to White-respondents' self esteem (Ottati et al., 2005) and, thus, did not create any impetus for them to adjust their perceptions about Korean American men, White-respondents were more generous in providing such adjustment for their in-group members. Prompting White-respondents to subtype the Korean-shooter, a strategy aimed at dampening the representativeness of the exemplar to his group (Bless & Schwarz, 2010), impelled them to adjust their beliefs about Korean American men. Like those in the White-exemplar condition, mental illness attribution was associated with weaker negative beliefs about Korean American men and greater willingness to affiliate with the group.

We did not find support for the UAE that people would attribute negative out-group behavior to group membership and negative in-group behaviors to external forces (in this case, mental illness). This lack of support is consistent with research suggesting that the UAE may not be as prevalent as previously thought (Hewstone, 1990; Khan & Liu, 2008). Furthermore, contrary to what might be predicted by the exemplar effect that the minority exemplar's behavior would lead to negative evaluations of members in his or

her racial group, we found a main effect where Korean American men were overall perceived as less dangerous and unpredictable than White American men. This effect could be because of general perceptions of Easterners as less expressive in displaying their anger (Kitamaya et al., 2006; Safdar, 2009) and more peace-loving (Kim & Markus, 1999) than Westerners.

We also find that female (vs. male) respondents in the current study were more likely to perceive men from the shooter's race as dangerous and unpredictable. In line with our reasoning that acknowledging the exemplar as an out-group member (in this case, based on gender) reduces threat to one's racial identity (Ottati et al., 2005) and, thus, reduces motivation to subtype the exemplar, females in the current sample might have been more likely to generalize perceptions of the exemplar directly to their gender out-group.

Contributions of the Current Research

The current research provides insights on inference-making and prejudice about out-group members, in particular Asian Americans. It addresses a gap in existing research on minority group exemplar effects, which has focused mainly on Black Americans. Unlike the extant literature that has focused on how judgments of an exemplar are generalized directly to the out-group (e.g., Henderson-King & Nisbett, 1996), the current research investigated the moderating role of causal attributions of an exemplar's behavior on social judgment of the affiliated racial group, unveiling a more complex relationship between exemplar's racial in-group/out-group status and interracial evaluations.

Leveraging vignettes based on real-world events, the current study had ecological validity and circumvented validity issues related to hypothetical scenarios. More important, it answered the call to understand "how stereotyping unfolds when perceivers are confronted with realistically multidimensional social targets" (Bodenhausen & Peery, 2009, p. 5). Besides race, the vignettes included other potential bases for categorization (e.g., mental illness and gender). Finally, these findings have significant implications for media depictions of minority group behavior and intergroup relations. For example, how a minority member's social characteristics and actions are depicted in the media may bias people's attributions about the behavior and provide justification for subsequent prejudice against the associated group. Hence, it is important that media explicitly highlight the atypicality of exemplars in news coverage of negative behavior by minority group exemplars.

Limitations and Future Directions

First, although the vignettes were standardized across conditions and analyses controlled for prior knowledge of the shootings, the two shootings varied on various aspects (e.g., time and location of events). Second, single-item measures were used to assess racial and mental illness attributions; thus, we were unable to evaluate the reliability of these measures. However, these items appeared to work in the predicted directions. Third, even though we were able to obtain our predicted results across the different conditions, the absence of randomization of the measures in the survey did not allow us to rule out order effects.

Given our focus on how White-respondents perceive and subtype Asian Americans, we did not examine how Korean Ameri-

cans would react to these scenarios. It remains uncertain whether Koreans would exhibit in-group-out-group responses that mirror responses by the present sample. It is possible that they would not react similarly because Asians are relatively more inclined to form situational rather than dispositional attributions of people's behavior (Morris & Peng, 1994; Nisbett, 2003). Future research could investigate how Asian minority members' generalize exemplar behavior to their evaluation of White majority members. Additionally, it is uncertain whether the adjustment of beliefs based on mental illness attribution in the White-vignette and Korean-vignette/subtyping conditions increased prejudice against people with mental illness, shifting the burden from racism to mental illness stigma. Because the current study focused on attitudes toward racial categories, negative beliefs and social distance in relation to people with mental illness were not examined. Future research should determine whether mental illness stigma is exacerbated after such adjustment.

Conclusion

Both the Virginia Tech and Columbine High shootings were devastating events that triggered a lot of sense-making among the American public (Aronson, 2000). Using vignettes based on these real-world events, the present research demonstrated that being exposed to a Korean American rampage shooter in the media and perceiving race as a cause for this violence was positively associated with negative beliefs and social distance toward Korean American men. Whereas prompting White-respondents to subtype the Korean-exemplar helped White-respondents adjust their negative beliefs about Korean American men according to their attribution of the shooting to mental illness, it did not eliminate the effect of racial attribution on negative beliefs and social distance. From a policy standpoint, enhancing motivation to subtype and steering people away from making causal attributions of race seems like the optimal strategy to mitigate the adverse impact of exposure to negative out-group exemplars.

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