International Journal of Psychology, 2013
Vol. 48, No. 5, 922–934, http://dx.doi.org/10.1080/00207594.2012.692798

Routledge
Taylor & Francis Group

Social identity, attribution, and emotion: Comparisons of Americans, Korean Americans, and Koreans

Hee Sun Park[1], Doshik Yun[2], Hye Jeong Choi[3], Hye Eun Lee[4], Dong Wook Lee[5], and Jiyoung Ahn[6]

[1]Department of Communication, Michigan State University, East Lansing, MI, USA
[2]Department of Communication, Western Illinois University, Macomb, IL, USA
[3]Department of Communication Arts & Sciences, Pennsylvania State University, University Park
[4]Department of Communicology, University of Hawaii at Manoa, Honolulu, HI, USA
[5]Marine and Environmental Research Institute, Jeju National University, Jeju, South Korea
[6]Department of Early Childhood Education, Chung-Ang University, Seoul, South Korea

The social identity of another person, in addition to the social identity of self, can be an important factor affecting the types of attribution judgments and emotions that individuals indicate for the other person. In April 2007, the perpetrator of the shooting incident on the Virginia Tech University campus was identified as a person who emigrated to the USA from Korea at a young age. The current study compared non-Korean Americans, Korean Americans, Koreans in the USA, and Koreans in Korea in terms of their attributions and emotions concerning the perpetrator and the shooting incident. Participants were asked to indicate (1) the extent to which they attributed the cause of the incident to either American society or the perpetrator, (2) their emotions (e.g., upset), and (3) the extent to which they categorized the perpetrator as an American, a Korean American, or a Korean. The results indicated that non-Korean Americans were most likely to attribute the cause of the incident to the perpetrator as opposed to American society. Non-Korean Americans, Korean Americans, and Koreans in the United States had more negative emotions (e.g., unhappy, sad, and upset) about the incident than Koreans in Korea did. The results also indicated that individuals differed in their attributions and emotions depending on how they categorized the perpetrator. For example, categorizing the perpetrator as being a Korean was positively related to Americans' tendency to hold the perpetrator responsible, while categorizing the perpetrator as being an American was negatively related to the tendency to hold the perpetrator responsible among Koreans in Korea. The findings may imply that social identity theory, intergroup emotion theory, and cultural orientations (e.g., individualism and collectivism) can provide insights into people's reactions to a tragic incident.

Keywords: Koreans; Korean Americans; Attribution; Emotion; Culture; Social identity.

L'identité sociale d'une autre personne, en plus de l'identité sociale de soi, peuvent toutes deux être des facteurs importants qui affectent les types de jugements attributionnels et les émotions que les individus identifient chez l'autre personne. En avril 2007, l'auteur de la fusillade sur le campus de la Virginia Tech University a été identifié comme une personne de la Corée qui est immigrée aux États-Unis en bas âge. La présente étude comparait les Américains non coréens, les Américains Coréens, les Coréens vivant aux États-Unis et les Coréens vivant en Corée relativement à leurs attributions et à leurs émotions concernant l'auteur de la fusillade. Les participants devaient indiquer (1) s'ils attribuaient la cause de l'incident à la société américaine ou au criminel; (2) leurs émotions (p. ex., la colère) et (3) s'ils catégorisaient le criminel comme étant Américain, Coréen Américain ou Coréen. Les résultats ont montré que les Américains non coréens étaient plus susceptibles d'attribuer la cause de l'incident à l'auteur de la fusillade plutôt qu'à la société américaine. Les Américains non

Correspondence should be addressed to Hee Sun Park, Department of Communication, Michigan State University, 481 CAS, East Lansing, MI 48824-1212USA. (E-mail: heesun@msu.edu).

coréens, les Américains Coréens et les Coréens vivant aux États-Unis avaient plus d'émotions négatives (p. ex., mécontentement, tristesse et colère) à propos de l'incident que les Coréens vivant en Corée. Les résultats ont aussi montré que les individus différaient dans leurs attributions et leurs émotions dépendamment de la façon dont ils catégorisaient le criminel. Par exemple, le fait de catégoriser le criminel comme un Coréen était positivement relié à la tendance des Américains à accorder la responsabilité de l'événement au criminel, tandis que le fait de catégoriser le criminel comme un Américain était négativement relié à la tendance des Coréens vivant en Corée à tenir le criminel comme responsable. Les résultats peuvent impliquer que la théorie de l'identité sociale, la théorie des émotions intergroupes et les orientations culturelles (p. ex., l'individualisme et le collectivisme) peuvent fournir des indications sur les réactions des gens face aux incidents tragiques.

La identidad social de otra persona, además de la identidad social de uno mismo, pueden ser factores importantes al afectar los tipos de juicios atribucionales y emociones que los individuos indican acerca de la otra persona. En abril de 2007 se identificó al perpetrador del incidente de arma de fuego en el campus de la Virginia Tech University como una persona que emigró a Estados Unidos de América (EUA) de Corea a temprana edad. El presente estudio comparó estadounidenses no coreanos, coreano-estadounidenses, coreanos en Estados Unidos y coreanos en Corea en términos de sus atribuciones y emociones respecto del perpetrador y el incidente de arma de fuego. Se pidió a los participantes que indicaran (1) la medida en que atribuyeron la causa del incidente a la sociedad estadounidense o el perpetrador, (2) sus emociones (p. ej., alterado), y (3) la medida en que categorizaron al perpetrador como estadounidense, coreano-estadounidense o coreano. Los resultados indicaron que los estadounidenses no coreanos tendieron a atribuir la causa del incidente al perpetrador, no a la sociedad estadounidense. Los estadounidenses no coreanos, coreano-estadounidenses y coreanos en Estados Unidos tuvieron más emociones negativas (p. ej., infeliz, triste y alterado) acerca del incidente que los coreanos en Corea. Los resultados también indicaron que los individuos difirieron en sus atribuciones y emociones dependiendo de cómo categorizaron al perpetrador. Por ejemplo, categorizar al perpetrador como coreano se relacionó positivamente con la tendencia de los estadounidenses a sostener al perpetrador como responsable, mientras que categorizar al perpetrador como estadounidense se relacionó negativamente con la tendencia a sostener al perpetrador como responsable, entre los coreanos en Corea. Los hallazgos pueden implicar que la teoría de la identidad social, la teoría de la emoción intergrupal y las orientaciones culturales (p. ej., el individualismo y colectivismo) pueden proporcionar conocimiento sobre las reacciones de la gente ante un incidente trágico.

A lethal shooting incident occurred on the campus of Virginia Polytechnic Institute and State University (i.e., Virginia Tech) in the United States on April 16, 2007. Although this incident was a tragedy, school shootings had happened in the US before. A surprise, however, was the ethnicity (Korean) of the perpetrator (Choi Seung-Hui), especially in the eyes of Asians living in the US, more specifically Koreans and Korean Americans. A Korean immigrant was the perpetrator of the deadliest school shooting in American history to date, killing 32 people and injuring 17.

For the first few days after the shooting incident, the perpetrator's identity was not clearly reported. Sometimes the perpetrator was reported as a Korean citizen, an international student from Korea studying in the US, or a Korean American. The perpetrator was finally identified as a person who had Korean citizenship, emigrated to the US from Korea at a very young age, and had lived in the US for 15 years. As such, the perpetrator shared the same ethnicity and/or nationality with Koreans living in either Korea or the US, but there were also differences in how the perpetrator was similar to people of each type of Korean ethnicity. That is, in addition to ethnicity, Koreans in Korea shared citizenship/nationality with the perpetrator. What Korean nationals working and living in the US shared with the perpetrator included citizenship/nationality as well as sojourner standing in the US. Legal residence and minority status in the US were what Korean Americans shared with the perpetrator.

Considering the characteristics of the perpetrator, this study focused on four groups: Koreans in South Korea, Korean citizens temporarily living in the US (e.g., students attending US universities and expatriate workers and their spouses), Korean Americans (individuals who identify themselves as Korean Americans and are citizens or permanent residents of the US), and non-Korean American citizens (hereafter, Americans, distinguished from Korean Americans and Koreans). Although Americans also consider the shooting a tragedy, Koreans and Korean Americans might have paid greater attention to the shooting and the perpetrator. Still, the differences between the perpetrator and each of three groups with Korean ethnicity may affect individual responses. Thus, the four groups were compared with one another to see if

they exhibited different emotions and attributions of responsibility for the Virginia Tech incident.

ATTRIBUTION AND EMOTION

Social identity theory (SIT), intergroup emotion theory (IET), and individualism–collectivism (IC) can be applied to understanding of people's responses regarding the Virginia Tech shooting case. Social identity, which is based on individuals' memberships in social groups (e.g., ethnicity, gender), can be a source of ingroup biases (Tajfel, 1978; Tajfel & Turner, 1986). When evaluating the incident, individuals may make an internal attribution (i.e., the perpetrator himself is responsible for the tragedy) or an external attribution (i.e., American society is responsible for the tragedy). As individuals need to see themselves in positive terms, they generally make internal attributions for ingroup members' positive behaviors and outgroup members' negative behaviors, whereas they make external attributions for ingroup members' negative behaviors and outgroup members' positive behaviors (Chatman & von Hippel, 2001; Islam & Hewstone, 1993; Jackson, Sullivan, & Hodge, 1993).

Compared to Americans, Koreans are characterized as more collectivistic in terms of their relatedness with others (e.g., seeing oneself as a member of a group) and less individualistic (Oyserman, Coon, & Kemmelmeier, 2002). People in collectivistic cultures see self as embedded in social roles and relationships and interdependent on contexts, whereas those in individualistic cultures see self as independent of social contexts, prioritizing personal attributes, and behaving consistently across different situations (Markus & Kitayama, 1991). Koreans paid attention to what others would do and think more strongly than Americans did (Choi & Park, 2010; Choi, Park, & Oh, 2011; Park, Lee, & Song, 2005). Past research on cultural differences in attribution also indicates that East Asians are less likely to make dispositional attributions and more likely to pay attention to contextual and situational information than North Americans (Choi, Dalal, Kim-Prieto, & Park, 2003; Choi, Nisbett, & Norenzayan, 1999; Morris & Peng, 1994).

Differentiation between ingroup and outgroup members is stronger in less individualistic cultures (Triandis, 1995). Individuals of Korean ethnicity might have considered the Virginia Tech shooting perpetrator as an ingroup member because of their shared ethnicity. As a way to protect their social identity, individuals of Korean ethnicity may make an external attribution treating his troubled behavior as being the result of growing up in America. On the other hand, because of some differences between each group of individuals with Korean ethnicity and the perpetrator (e.g., Koreans in Korea and the perpetrator differ in their residence) and the atrocious nature of the crime, some Koreans or Korean Americans may try to keep a distance from the perpetrator, not considering him as an ingroup member who belongs to the same social group as they do. If so, they may emphasize the fact that the perpetrator grew up in America and he is not much different from other troubled students in the US who have carried out school shootings in the past. Thus, individuals of Korean ethnicity may put more blame on American society than on the perpetrator himself.

In addition to individuals' own social identities, their categorization of the perpetrator (being an American, a Korean American, and a Korean) may also influence their attribution judgments about the incident. First, individuals can differ in their categorization of the perpetrator. For example, some individuals may be more likely than others to perceive the perpetrator as an American, possibly because he had lived in the US for many years. Even among Koreans in the US, some Koreans may be more likely to categorize the perpetrator as a Korean American whereas others may categorize him as a Korean, depending on whether they focus more on legal residence or citizenship. Second, individual variations in categorizing the perpetrator may reflect whether individuals focus on the perpetrator being from an ethnic minority (i.e., a Korean American), a foreigner/international student (i.e., a Korean), or in a broad sense an American who committed another school shooting in the US. Consequently, attribution of responsibility for the Virginia Tech shooting incident may differ. For example, despite media repeatedly showing photos of the perpetrator's Asian face, individuals categorizing the perpetrator as being an American may be more likely to characterize the incident as one of many school shootings in the US, and thus are more likely to attribute responsibility to American society. On the other hand, individuals categorizing the perpetrator as being a Korean may pay greater attention to individual characteristics of the perpetrator (e.g., a Korean national emigrated from South Korea who had mental health problems), and thus are more likely to attribute responsibility to the perpetrator himself.

In addition to attribution judgment, individuals' own social identities may lead to different extents

of negative emotions. Intergroup emotion theory explains that emotions can be affected by identification with social groups (Mackie, Smith, & Ray, 2008). While individuals experience emotion for a personally relevant event, they can also feel emotions for other people who belong to their social group (Frijda, Kuipers, & ter Schure, 1989; Smith, 1993; Smith & Ellsworth, 1985). Individuals often make group-relevant appraisals and experience anger regarding an incident involving their ingroup members or similar others as victims of harmful behaviors (Gordijn, Wigboldus, & Yzerbyt, 2001; Mackie, Devos, & Smith, 2000; Yzerbyt, Dumont, Wigboldus, & Gordijn, 2003). Additionally, individuals can feel collective guilt when they learn of their group members' wrongdoings against outgroup members (Castano & Giner-Sorolla, 2006; Doosje, Branscombe, Spears, & Manstead, 1998). However, individuals with stronger ingroup identities are more likely to appraise ingroup aggression as being justified and may possibly feel less guilt (Doosje et al., 1998; Maitner, Mackie, & Smith, 2007). As Americans may focus more on the victims of the shooting, they may experience negative emotions such as feeling sad and unhappy more strongly than Koreans and Korean Americans. Because of their shared social identities with the perpetrator, however, individuals of Korean ethnicity may experience weaker negative emotions in relation to the incident in general, as their focus may be more on the perpetrator.

Intergroup emotion theory states that social categorizations of others and situational characteristics can generate specific emotional responses (Mackie et al., 2008). Individuals experience a different level of anger when they perceive the victims of harmful behaviors and the perpetrator of the behaviors as ingroup versus outgroup members (Gordijn et al., 2001; Gordijn, Yzerbyt, Wigboldus, & Dumont, 2006; Yzerbyt et al., 2003). For example, when examining the emotional reactions of research participants in The Netherlands and Belgium regarding the September 11th terrorist attacks on the United States, categorizing the victims as either the same or different group members affected fear but did not affect sadness or anger levels (Dumont, Yzerbyt, Wigboldus, & Gordijn, 2003). Although a tragedy such as the Virginia Tech shooting incident generates negative emotions in general, some types of negative emotion may be more likely to be experienced than other types, depending on how individuals categorize the perpetrator and view the incident. For example, individuals categorizing the perpetrator as an American may focus on school shootings being repeat tragedies in the US, and consequently feel annoyed and upset about why some troubled American students engage in such acts. On the other hand, characterizing the perpetrator as being a Korean American may be more relevant for feeling bad because of unwanted attention to his ethnicity. As most school shootings in the United States were carried out by white Americans (Newman & Fox, 2009), a Korean American student being the perpetrator of the most lethal school shooting in the history of the United States can be conspicuous for his ethnicity and may arouse bad feelings in terms of what the American public may think about Koreans and Korean Americans. Collective guilt and fear of a racial backlash were speculated to have motivated the Korean President, the Korean ambassador to the US, and other Korean and Korean American leaders to offer public apologies and condolences regarding the Virginia Tech shooting incident (Chong, 2008; Hong, 2007; Lim, 2007). Thus, depending on individuals' own identity and their view of the perpetrator, they may experience varying degrees of negative emotions.

In sum, the current study proposes the following hypotheses.

- *H1:* Korean Americans, Koreans in the United States, and Koreans in Korea will be less likely to attribute the cause of the Virginia Tech incident to the perpetrator himself than Americans will.
- *H2:* The extent to which individuals categorize the perpetrator as being an American, a Korean American, or a Korean will be differentially related to the attributions among Americans, Korean Americans, Koreans in the United States, and Koreans in Korea.
- *H3:* Americans will report stronger negative emotions (not happy, sad, upset, annoyed, and feeling bad) about the incident than Korean Americans, Koreans in the United States, and Koreans in Korea will.
- *H4:* The extent to which individuals categorize the perpetrator as being an American, a Korean American, or a Korean will be differentially related to the negative emotions among Americans, Korean Americans, Koreans in the United States, and Koreans in Korea.

H2 and H4 specify the moderating effect of social identities of individuals (Americans, Korean Americans, Koreans in the United States, and Koreans in Korea) for the relationships between categorization of the perpetrator and the

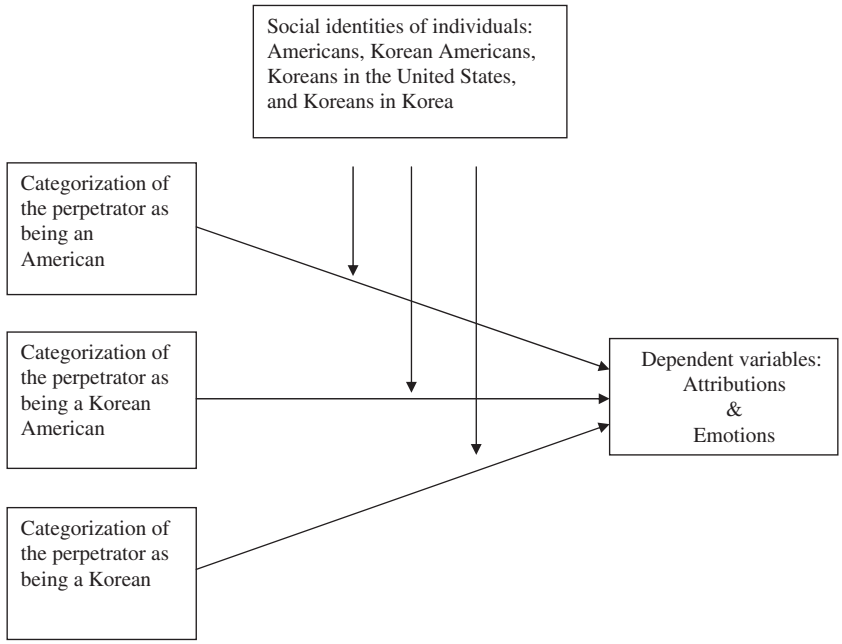

Figure 1. Illustration of the hypothesized relationships among the variables.

dependent variables (attributions and emotions). Figure 1 illustrates the relationships among the variables.

The current study focused on five types of negative emotion (not happy, sad, upset, annoyed, and feeling bad). The predictions of H3 and H4 will be tested for each type of emotion. Thus, the following research question is posed:

Research question

RQ: Will individuals' social group types and categorizations of the perpetrator be differentially related to various emotions?

METHOD

Data collection was conducted between April 21 and April 26, 2007, after Institutional Review Board approval was obtained on April 20. Both online and paper-and-pencil questionnaires were administered to facilitate speedy data collection. Student samples were recruited at universities in Michigan in the US and Seoul and Jeju in South Korea. Recruiting the nonstudent sample involved utilizing the authors' personal contacts and visiting public places (e.g., airports and laundromats) in Michigan and in Seoul and Jeju. Students received extra credit and nonstudents received monetary incentive (2 to 5 dollars) for research participation. Nonstudent participants' job categories included 24.8% administrative support, 11.7% technology, 4.5% finance, 9.0% healthcare, 2.3% hourly work, 1.1% human resources, 4.1% management, 6.4% public service, 7.5% sales, and 28.6% others (e.g., self-employed, unemployed, homemakers).

Participants (total $N = 734$) were asked to self-identify themselves as American citizens, Korean citizens, permanent residents in the United States, students, and/or nonstudents. The participants were asked whether they had heard of the shooting incident, and 15 participants who answered "not at all" were removed from data analyses. A brief introduction was placed before the measurement items: "This survey is about your opinions on the shooting incident that took place at Virginia Tech in the USA on April 16th. The shooter, Cho Seung-Hui, killed 32 people on campus and shot himself."

Participants

Non-Korean American participants consisted of 156 students and 67 nonstudents. Of the participants (62.2% women, age $M = 26.59$, $SD = 10.36$), 81.4% were White, 8.6% were African American, 0.9% were Native American, 1.8% were Asian American excluding Korean Americans, 2.3% were Hispanic, 0.9% were mixed, and 4.1% were categorized as other.

Korean American participants (66.7% women, age $M = 35.81$, $SD = 9.18$) included three students and 54 non-students. Of the participants, 42% were US citizens, and 58% were permanent residents.

Participants had lived in the US for 10.36 years on average ($SD = 5.50$).

Korean citizens living in the United States (64% women, age $M = 31.82$, $SD = 4.72$) consisted of 40 students and 99 nonstudents. These participants did not have permanent resident status in the US and had been there for 4.03 years on average ($SD = 2.84$).

Korean participants included 197 students and 118 nonstudents residing in Korea. All participants were ethnically Korean (57.1% women, age $M = 24.93$, $SD = 4.69$).

Measures

Translation and back-translation of English and Korean versions of a questionnaire were conducted by translators fluent in both languages. Any discrepancies during the translation processes were resolved with due consideration of the meanings of both languages. Participants responded to items measuring emotions first, followed by attribution, categorization, and demographic information.

Emotions

Five semantic differential scale items assessed emotions concerning the incident (happy/unhappy, not sad/sad, good/bad, not annoyed/annoyed, not upset/upset). Higher scores represented more negative emotions regarding the incident (e.g., 1 = not upset; 5 = upset). These five emotion items showed a Cronbach α reliability of .80. However, in order to examine the effects of independent variables on specific emotions, the main analyses were conducted for each emotion word as shown in Tables 1 and 3.

Attribution

Four items ($\alpha = .89$) measured the extent to which individuals attributed the cause of the incident to either American society or the perpetrator (e.g., ''Which party, the individual or American society, was more responsible for the incident?''). All items used a five-point bipolar scale (i.e., 1 = American society; 5 = Cho Seung-Hui). Scores were averaged to indicate that higher means indicate greater attribution to Cho Seung-Hui. Confirmatory factor analysis showed an acceptable fit for a one-factor solution (NFI = .98, CFI = .99, IFI = .99).

Categorization

Three single-items measured the extent to which participants categorized the perpetrator into each of three different national and ethnic groups (an American, a Korean American, and a Korean). Higher scores indicated stronger categorization of the perpetrator as belonging to each ethnic group (1 = strongly disagree; 5 = strongly agree).

RESULTS

This study adopted $p < .05$ as an acceptable level of statistical significance. Table 1 gives the correlations, means, standard deviations, and the ANOVA results as preliminary analysis findings.

Before conducting moderated multiple regression analyses, three dummy variables were created to categorize the four participant groups. The first dummy variable (labeled ''Korean Americans'') included Americans as the reference group (coded as 0) and Korean Americans as the comparison group (coded as 1). The second dummy variable (labeled ''Koreans in the United States'') included Americans as the reference group (coded as 0) and Koreans in the United States as the comparison group (coded as 1). The third dummy variable (labeled ''Koreans in Korea'') included Americans as the reference group (coded as 0) and Koreans in Korea as the comparison group (coded as 1). Age, gender, and sample characteristics (students and nonstudents) were included in the regression analyses as control variables. Continuous variables were mean-centered before creating interaction terms with each dummy variable. Hierarchical multiple regression analyses included the continuous variables and dummy variables in the first block and the interaction terms in the second block.

Attribution

H1 predicted that participants with Korean ethnicity would be less likely to attribute the cause of the incident to the perpetrator than Americans would. H2 predicted statistical interactions between categorization of the perpetrator and participants' social identities when affecting attribution. As shown in Table 2, five predictors in the first block were significant. Compared to men, women were less likely to attribute the cause of the incident to the perpetrator. As individuals were more likely to categorize the perpetrator as being an American, they were less likely to attribute the cause of the incident to the perpetrator.

TABLE 1
Correlations, means, standard deviations, and ANOVA results

	C1	*C2*	*C3*	*Emotion*					
	Categorization of the perpetrator as being an American	*Categorization of the perpetrator as being a Korean American*	*Categorization of the perpetrator as being a Korean*	*Attribution*	*Not happy*	*Sad*	*Bad*	*Annoyed*	*Upset*
C2	.10*								
C3	−.40*	.09*							
Attribution	−.10*	−.02	.11*						
Not happy	.02	.11*	−.04	.18*					
Sad	−.05	.07	.05	.07	.39*				
Bad	.00	.12*	.00	.20*	.55*	.42*			
Annoyed	.03	.11*	.02	.13*	.33*	.30*	.37*		
Upset	−.04	.06	.02	.12*	.43*	.60*	.46*	.36*	
Total Mean (SD)	3.23 (1.08)	3.73 (0.98)	2.96 (1.02)	3.46 (1.16)	4.37 (0.77)	4.32 (0.87)	4.26(0.81)	3.94(0.96)	4.36(0.85)
Americans	3.24_{a} (1.18)	3.69_{a} (1.03)	3.11_{a} (1.09)	4.25_{a} (0.99)	4.69_{a} (0.64)	4.66_{a} (0.61)	4.55_{a} (0.66)	4.14_{a} (0.98)	4.52_{a} (0.64)
Korean Americans	3.25_{a} (1.00)	4.18_{b} (0.94)	2.91_{ab} (1.01)	3.21_{b} (1.11)	4.44_{a} (0.67)	4.42_{a} (0.74)	4.21_{bc} (0.94)	4.09_{ab}(0.77)	4.50_{a}(0.83)
Koreans in the United States	3.32_{a} (1.06)	3.94_{b} (0.98)	2.7_{b} (1.00)	3.03_{b} (1.01)	4.49_{a} (0.63)	4.57_{a} (0.70)	4.35_{ab} (0.92)	3.90_{ab} (1.01)	4.59_{a}(0.72)
Koreans in Korea	3.18_{a} (1.02)	3.58_{a} (0.91)	2.96_{ab} (0.96)	3.13_{b} (1.06)	4.09_{b} (0.80)	3.96_{b} (0.98)	4.02_{c} (0.76)	3.79_{b} (0.94)	4.12_{b} (0.97)
ANOVA results	$F(3, 710) = 0.62$, $p = .65$, $\eta^2 = .00$	$F(3, 711) = 8.75$, $p < .001$, $\eta^2 = .04$	$F(3, 702) = 3.15$, $p = .03$, $\eta^2 = .01$	$F(3, 707) = 61.29$, $p < .001$, $\eta^2 = .21$	$F(3, 550) = 24.71$, $p < .001$, $\eta^2 = .12$	$F(3, 585) = 30.99$, $p < .001$, $\eta^2 = .14$	$F(3, 550) = 16.44$, $p < .001$, $\eta^2 = .08$	$F(3, 562) = 5.39$, $p = .001$, $\eta^2 = .03$	$F(3, 584) = 12.34$, $p < .001$, $\eta^2 = .06$

*$p < .05$. Within each column, means with different subscripts (a, b, and c) are significantly different from one another at $p < .05$.

TABLE 2
Regression results for attribution

	B	*SE*	β	*t*
First block				
Age	−0.01	0.01	−.04	−0.87
Gender (dummy-coded with men = 0 and women = 1)	−0.34	0.08	−.15	−4.39*
Sample (dummy-coded with student = 0 and non-student = 1)	−0.05	0.10	−.02	−0.48
C1 (categorization of the perpetrator as being an American)	−0.11	0.04	−.10	−2.82*
C2 (categorization of the perpetrator as being a Korean American)	0.05	0.04	.04	1.20
C3 (categorization of the perpetrator as being a Korean)	0.06	0.04	.06	1.57
Korean Americans (dummy-coded with Korean Americans = 1 and Americans = 0)	−1.04	0.16	−.25	−6.56*
Koreans in the United States (dummy-coded with Koreans in the US = 1 and Americans = 0)	−1.24	0.12	−.43	−10.66*
Koreans in Korea (dummy-coded with Koreans in Korea = 1 and Americans = 0)	−1.22	0.09	−.54	−13.70*
$F(9, 674) = 30.19$, $p < .001$, adj.$R^2 = .29$				
Second block				
C1 × Korean Americans	0.01	0.15	.00	0.06
C2 × Korean Americans	−0.09	0.16	−.02	−0.60
C3 × Korean Americans	0.09	0.15	.02	0.63
C1 × Koreans in the United States	0.14	0.11	.06	1.34
C2 × Koreans in the United States	0.00	0.11	.00	0.03
C3 × Koreans in the United States	−0.09	0.11	−.04	−0.85
C1 × Koreans in Korea	−0.22	0.09	−.13	−2.37*
C2 × Koreans in Korea	−0.09	0.10	−.05	−0.91
C3 × Koreans in Korea	−0.21	0.10	−.12	−2.08*
$F_{change}(9, 665) = 1.75$, $p = .04$, $R^2_{change} = .02$				

*$p < .05$.

Consistent with H1, the results showed that all three dummy variables were significant, indicating that Americans showed a stronger tendency to attribute the cause of the incident to the perpetrator than did Korean Americans, Koreans in the United States, or Koreans in Korea.

Partially consistent with H2, two interaction term predictors in the second block were significant. To probe the pattern of each significant interaction, simple slope analyses were conducted as explained below.

Americans versus Koreans in Korea for categorizing the perpetrator as being an American

The interaction term of C1 × Koreans in Korea was significant. The relationship between the categorization of the perpetrator as being an American and attribution was negative but not significant for Americans; simple slope (b) = −0.06, $SE = 0.06$, $p = .27$. However, the relationship was negative and significant for Koreans in Korea; $b = -0.31$, $SE = 0.07$, $p < .001$. As Koreans in Korea were more likely to consider the perpetrator as being an American, they were less likely to attribute the cause of the incident to the perpetrator.

Americans versus Koreans in Korea for categorizing the perpetrator as being a Korean

The interaction term of C3 × Koreans in Korea was significant. The relationship between the categorization of the perpetrator as being a Korean and attribution was positive for Americans ($b = 0.13$, $SE = 0.06$, $p = .02$) but negative and nonsignificant for Koreans in Korea ($b = -0.08$, $SE = 0.08$, $p = .34$). As Americans were more likely to consider the perpetrator as being a Korean, they were more likely to attribute the cause of the incident to the perpetrator.

Emotions

H3 predicted that Americans would report stronger negative emotions than would participants with Korean ethnicity. H4 predicted statistical interactions between categorization of the perpetrator and participants' social identities when affecting negative emotions. The findings regarding the dummy variables, which were relevant to H3, are included in Table 1 (i.e., ANOVA results concerning the mean comparisons for each emotion). Inconsistent with H3, the results showed that Americans, Korean Americans, and Koreans in the United States experienced being unhappy, sad,

TABLE 3
Regression results for emotions

	Unhappy		*Sad*		*Bad*		*Annoyed*		*Upset*	
	β	t	β	t	β	t	β	t	β	t
Age	.12	2.10*	.11	2.14*	.10	1.68	.03	0.52	.08	1.48
Gender (dummy-coded with men = 0 and women = 1)	.11	2.67*	.20	4.83*	.08	1.86	.03	0.69	.21	5.28*
Sample (dummy-coded with student = 0 and nonstudent = 1)	−.08	−1.42	.01	0.24	−.02	−0.37	.02	0.30	.06	1.06
C1 (categorization of the perpetrator as being an American)	−.01	−0.29	.03	0.65	−.04	−0.87	−.06	−1.27	−.05	−1.06
C2 (categorization of the perpetrator as being a Korean American)	.10	2.30*	.10	2.35*	.11	2.63*	.06	1.38	.06	1.43
C3 (categorization of the perpetrator as being a Korean)	−.05	−0.98	.03	0.67	−.03	−0.72	−.01	−0.22	.03	0.68
	$F(6, 547) = 2.92$, $p = .008$, adj.$R^2 = .02$		$F(6, 582) = 6.58$, $p < .001$, adj.$R^2 = .05$		$F(6, 532) = 2.50$, $p = .02$, adj.$R^2 = .02$		$F(6, 559) = 0.80$, $p = .57$, adj.$R^2 = .00$		$F(6, 580) = 7.15$, $p < .001$, adj.$R^2 = .06$	

*$p < .05$.

and upset to a greater extent than did Koreans in Korea (see Table 1). For emotions of feeling bad and annoyed, Americans indicated stronger feelings than Koreans in Korea, but Korean Americans and Koreans in the US did not differ from Americans and/or Koreans in Korea. Initially, hierarchical multiple regression analyses were conducted with all the main independent variables in the first block and the interaction terms in the second block. Inconsistent with H4, however, the interaction terms did not explain a significant amount of variance in any of the five emotion variables (all $F_{\text{change}}(9, 557) < 1.78$, $p > .07$). Thus, Table 3 reports the regression results only with the control and categorization variables. As shown in Table 3, as individuals were more likely to categorize the perpetrator as being a Korean American, they reported stronger emotions of being unhappy, sad, and feeling bad. Age was a positive predictor of feeling unhappy and sad. Gender was significant, indicating that women reported stronger emotions of being unhappy, sad, and upset than men did.

In summary, Figure 2 illustrates the two significant interaction effects. Because the hypothesized interaction effects were not significant for emotions, Figure 2 shows the results only for attributions. As shown in Figure 2, the significant interaction effects were observed for the differences between Americans and Koreans in Korea. The relationship between the categorization of the perpetrator as being an American and attribution was negative among Koreans in Korea but not significant among Americans. The relationship between the categorization of the perpetrator as being a Korean and attribution was positive among Americans but not significant among Koreans in Korea.

DISCUSSION

The use of a real-life case enabled examination of responses regarding a situation where the perpetrator had multiple identities, some of which were differentially shared with individuals in Korea and the US. The characteristics of this incident, however, are complex in such a way that no one theoretical perspective alone may be adequate in explaining individuals' responses regarding the incident and the perpetrator. Individualism–collectivism (IC), social identity theory (SIT), and intergroup emotion theory (IET) help differently in explaining the findings.

IC explained differences in attribution. The tendency to make an internal attribution (i.e., attributing the cause of an incident to the perpetrator) was greater among Americans (i.e., non-Korean American citizens) than among Korean Americans, Koreans in the United States,

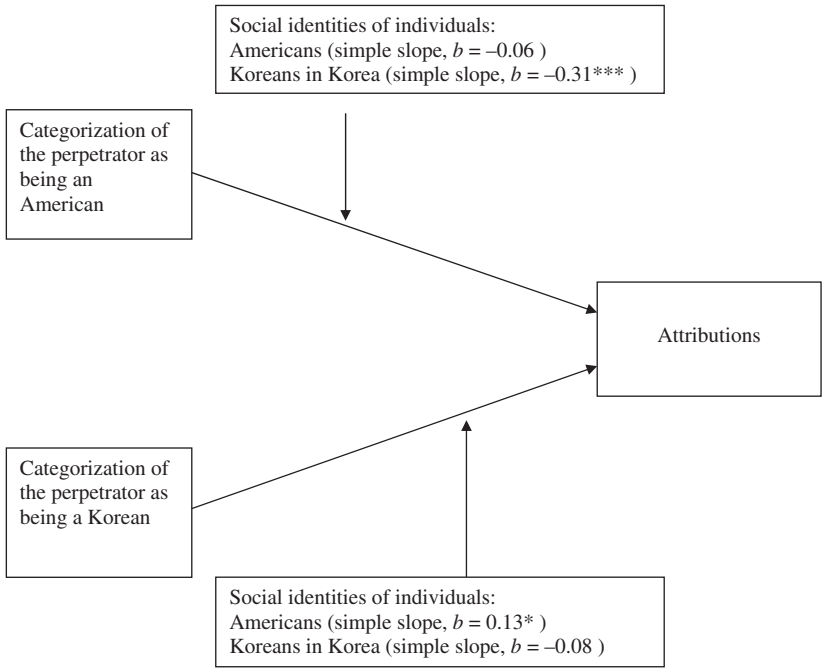

Figure 2. Illustration of the significant interaction effects. *$p < .05$, **$p < .01$, ***$p < .001$.

and Koreans in Korea. Given the different cultural beliefs regarding the self and relationships with others (Triandis, 1995), individuals from individualistic cultures may be more likely to adopt individual-based explanations for events occurring around them. IC also indicates that collectivists tend to make stronger ingroup and outgroup distinctions (Triandis, 1995). Thus, differences in attribution can be also explained by SIT and IET in such a way that stronger salience of ingroup among people with Korean ethnicity might have led Koreans in Korea and Koreans and Korean Americans in the US to evaluate the incident in favor of the ingroup, putting less blame on the perpetrator than Americans did.

Furthermore, among Koreans in Korea, those who were more likely to categorize the perpetrator as being an American showed a stronger tendency to attribute the cause of the incident to American society. Consistent with social identity theory, this finding may indicate that because categorizing the perpetrator as being an American may pose a less of a threat to Koreans in Korea, they might have been more likely to exhibit their collectivistic orientations by attributing the cause of the incident to American society. However, among Americans, those who were more likely to categorize the perpetrator as being a Korean showed stronger tendency to attribute the cause of the incident to the perpetrator himself. For Americans, seeing the perpetrator as a Korean might have highlighted the perpetrator's personal difficulties such as being a young immigrant who could not assimilate with the American culture, received harassment from his classmates, and had mental health problems (Kim & Dickson, 2007).

On the other hand, the fact that the perpetrator was a person of ethnicity minority in the US might have led Americans and individuals with Korean ethnicity to evaluate the perpetrator and the incident differently. This shooting incident was not a case of intergroup conflicts, but rather a case where the perpetrator simply happened to be a minority person, bringing unwanted attention to individuals who have some similarities with him. The current study may imply that SIT and IET may be more readily applied to ethnic minority people's responses than majority people's, if a violent act is performed by an ethnic minority person, but such violent acts were done with some frequency in the past by perpetrators with other ethnicities. In one sense, the perpetrator's ethnic minority might have generated a contrast effect with the other previous school shooting perpetrators. With increased attention to the perpetrator's ethnic minority status, individuals with Korean ethnicity might have been more likely to make group-based attributions relevant to their social identities.

The effects of individuals' specific group membership and social categorization of the

perpetrator were not uniform across the five types of emotion examined in the current study. Americans, Korean Americans, and Koreans in the United States all experienced being unhappy, sad, and upset to a greater extent than did Koreans in Korea, possibly because the suffering of the victims was more salient among individuals residing in the United States than among individuals residing in Korea. Besides the geographical distance, another reason may explain why Koreans in Korea were different from others in the US.

IET posits that individuals with stronger group identity experience more intense emotions regarding an event relevant to their group. However, Mackie et al. (2008) noted the exception that when negative emotions can reflect poorly on the group, highly identified members may be less likely to experience such emotions (Doosje et al., 1998; Maitner et al., 2007), possibly because of undesired implications of such emotions. The current study found that Koreans in Korea experienced negative emotions less intensely than other groups in the current study. As discussed above, the geographical location difference can be an explanation for the result. Another explanation may be that negative emotions might have been harder for Koreans in Korea to accept, as they have stronger Korean identity. Media coverage of the Virginia shooting incident was extensive in Korea and focused much more on the perpetrator than the victims. For example, one major newspaper in Korea gave twice as much coverage to the Virginia Tech shooting as a major newspaper in the United States (Lee, Shim, & Shim, 2008). Korean ethnicity might have become more salient among Koreans in Korea especially in regard to the perpetrator's crime. Discomfort about unwanted focus on the perpetrator being a Korean may underlie feeling less intense emotions about the incident occurring in the US. Alternatively, Koreans in Korea might have expressed less intense emotions because of their culture's emphasis on controlling negative emotions. Research showed that emotion suppression differs between people with Western and those with Asian cultural values (Butler, Lee, & Gross, 2007). Markus and Kitayama (1991) discussed the idea that people with interdependent selves in the East may be more likely to restrain negative emotions because overt expression of intense emotions can be dysfunctional and harmful to harmonious relationship with others.

For feeling bad and annoyed, Americans expressed stronger emotions than did Koreans in Korea. As discussed above, the differences between Americans and Koreans in Korea could be due to ethnic or cultural difference and also geographic location. However, the finding that Korean Americans and Koreans in the United States did not differ from Americans and/or Koreans in Korea may indicate multiple social identities in play. Korean Americans and Koreans in the United States had the same ethnicity with Koreans in Korea, but they were also similar to Americans because they lived in America.

The current study also found that, regardless of their own social identities, as individuals were more likely to categorize the perpetrator as being a Korean American, they reported stronger emotions of being unhappy, sad, and feeling bad. These emotions about the incident might have arisen because the participants in the current study were aware of the perpetrator's psychological problems resulting from his difficulty being a Korean American (i.e., a Korean growing up in the United States and adjusting to American culture). Feeling annoyed and upset, however, was not affected by categorizing the perpetrator as being an American, a Korean American, or a Korean. Overall, the current findings may imply that the effects of social identity and categorization on emotion can vary, with different aspects of incidents being salient to different individuals.

Furthermore, the result that categorization of the perpetrator as being a Korean American was the relevant dimension for feeling unhappy, sad, and bad may have implications for IET. Originally, IET stated that social identity leads people to experience group-based emotions regarding an event as the event is considered relevant for their ingroup. But the current finding may suggest that IET can be extended to a case where emotions can be experienced for an ethnic group, independent of one's own identity group. This study found that positive relations existed between categorizing the perpetrator as being a Korean American and feeling unhappy, sad, and bad, and the positive relations did not differ across Koreans in the US and Korea, Korean Americans, and Americans. Thus, when people categorize the perpetrator as belonging to an ethnic minority group in the US, they may experience emotions in response to events that can affect public views of the ethnic minority. In the US, other instances of racial backlashes and discrimination in the past (e.g., anti-Muslim attitudes after the 9/11 terrorist attacks, riots after the Rodney King beating) may have provided reasons for people to worry about prejudice against Korean Americans. The current finding may indicate that individuals' projection of the perpetrator being identified as a Korean Americans was related to feeling unhappy, sad, and bad, possibly because of undesirable

attentions that the public may pay to Korean Americans in general.

This paper has a few limitations. First, even when statistically significant, the independent variables had small effects on attributions and emotions. Small effects are not uncommon, especially with studies of real-life events (e.g., Dumont et al., 2003). Still, the current findings need to be interpreted cautiously. Second, this study did not assess social identity of each individual directly or measure the extent to which the perpetrator's ethnic identity threatened individuals' social identity. It is unclear whether or not wanting to be categorized in the same ethnic group as the perpetrator might have affected individuals' attribution and emotions about the incident. Third, the current study simply categorized the participants based on their ethnicity/nationality and residence location. It did not measure individual-level variables that can moderate culture-level differences in attribution and emotions about the incident. That is, cultural differences in attributions and emotions can vary at different levels of individual-level variables (moderators). For example, strength of ingroup identification may maximize or minimize differences between Koreans and Americans in attributions and emotions. When Koreans and Americans differ in their attributions, such differences can be more noticeable among individuals with stronger identification with their ingroup members. A future study may consider whether differences among people from different cultures or people living in different locations depend on varying levels of individual-level variables. Fourth, each emotion and categorization of the perpetrator was measured with single items. Although a single-item measure can have benefits of reducing item redundancy and improving research participants' reactions (e.g., decreased fatigue) (Robins, Hendin, & Trzesniewski, 2001), it is more likely to have reliability and validity problems than a multiple-item measure. Thus, the possibility of larger measurement error associated with single-item measures cannot be excluded when interpreting the current findings.

In conclusion, this research shows that not only cognitive evaluation of the shooting incident (i.e., attribution of the cause) but also emotions regarding the incident can differ with individuals' own social identities and their categorization of the perpetrator's social identity. For attributions, ethnicity and/or nationality was a salient dimension differentiating Koreans and Korean Americans from non-Korean Americans. But for emotions, residence (i.e., geographical proximity) was a salient dimension differentiating Koreans in Korea from Americans, Korean Americans, and Koreans in the United States. Thus, people's reactions to tragic incidents, such as the Virginia Tech shooting incident in April 2007, can be complex, especially when the social identity of the perpetrator draws different levels of attention from various segments of the general public.

Manuscript received July 2009
Revised manuscript accepted May 2012
First published online July 2012

REFERENCES

Butler, E. A., Lee, T. L., & Gross, J. J. (2007). Emotion regulation and culture: Are the social consequences of emotion suppression culture-specific? *Emotion, 7*, 30–48.

Castano, E., & Giner-Sorolla, R. (2006). Not quite human: Infrahumanization in response to collective responsibility for intergroup killing. *Journal of Personality and Social Psychology, 90*, 804–818.

Chatman, C. M., & von Hippel, W. (2001). Attributional mediation of in-group bias. *Journal of Experimental Social Psychology, 37*, 267–272.

Choi, I., Dalal, R., Kim-Prieto, C., & Park, H. (2003). Culture and judgment of causal relevance. *Journal of Personality and Social Psychology, 84*, 46–59.

Choi, I., Nisbett, R. E., & Norenzayan, A. (1999). Causal attribution across cultures: Variation and universality. *Psychological Bulletin, 125*, 47–63.

Choi, H. J., & Park, H. S. (2010). Factors affecting how individuals explain their behavioral intentions to others. *Korean Social Science Journal, 37*, 81–130.

Choi, H. J., Park, H. S., & Oh, J. Y. (2011). Cultural differences in how individuals explain their lying and truth-telling tendencies. *International Journal of Intercultural Relations, 35*, 749–766.

Chong, S. S. H. (2008). Look, an Asian!: The politics of racial interpellation in the wake of the Virginia Tech Shootings. *Journal of Asian American Studies, 11*, 27–60.

Doosje, B., Branscombe, N. R., Spears, R., & Manstead, A. S. R. (1998). Guilt by association: When one's group has a negative history. *Journal of Personality and Social Psychology, 75*, 872–886.

Dumont, M., Yzerbyt, V., Wigboldus, D., & Gordijn, E. H. (2003). Social categorization and fear reactions to the September 11th terrorist attacks. *Personality and Social Psychology Bulletin, 12*, 1509–1520.

Frijda, N. H., Kuipers, P., & ter Schure, E. (1989). Relations among emotion, appraisal, and emotional action readiness. *Journal of Personality and Social Psychology, 57*, 212–228.

Gordijn, E. H., Wigboldus, D., & Yzerbyt, V. (2001). Emotional consequences of categorizing victims of negative outgroup behavior as ingroup or outgroup. *Group Processes & Intergroup Relations, 4*, 317–326.

Gordijn, E. H., Yzerbyt, V., Wigboldus, D., & Dumont, M. (2006). Emotional reactions to harmful intergroup behavior. *European Journal of Social Psychology, 36*, 15–30.

Hong, A. (2007, April 20). Koreans aren't to blame. *Washington Post*, A31. Retrieved June 30, 2009 from www.washingtonpost.com/wp-dyn/content/article/2007/04/19/AR2007041902942.html

Islam, M. R., & Hewstone, M. (1993). Intergroup attributions and affective consequences in majority and minority groups. *Journal of Personality and Social Psychology, 64*, 936–950.

Jackson, L. A., Sullivan, L. A., & Hodge, C. N. (1993). Stereotype effects on attributions, predictions, and evaluations: No two social judgments are quite alike. *Journal of Personality and Social Psychology, 65*, 69–84.

Kim, S. S., & Dickson, G. (2007). Revisiting mental health issues in young immigrants: A lesson learned from the Virginia Tech massacre. *Issues in Mental Health Nursing, 28*, 939–942.

Lee, W. S., Shim, J. W., & Shim, J.-C. (2008). Media salience and the dynamic process of news frame changing: Coverage of the Virginia Tech shootings in Korea and the USA. *Korean Journal of Journalism & Communication Studies, 52*, 386–412.

Lim, J.-H. (2007, April 24). Our guilt weapon has boomeranged on us. *Chosun Ilbo*. Retrieved 30 June, 2009 from http://english.chosun.com/site/data/html_dir/2007/04/24/2007042461010.html

Mackie, D. M., Devos, T., & Smith, E. R. (2000). Intergroup emotions: Explaining offensive action tendencies in an intergroup context. *Journal of Personality and Social Psychology, 79*, 602–616.

Mackie, D. M., Smith, E. R., & Ray, D. G. (2008). Intergroup emotions and intergroup relations. *Social and Personality Psychology Compass, 2*, 1866–1880.

Maitner, A. T., Mackie, D. M., & Smith, E. R. (2007). Antecedents and consequences of satisfaction and guilt following ingroup aggression. *Group Processes & Intergroup Relations, 10*, 223–237.

Markus, H., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*, 224–253.

Morris, M. W., & Peng, K. (1994). Culture and cause: American and Chinese attributions for social and physical events. *Journal of Personality and Social Psychology, 67*, 949–971.

Newman, K., & Fox, C. (2009). Repeat tragedy: Rampage shootings in American high school and college settings, 2002–2008. *American Behavioral Scientist, 52*, 1286–1308.

Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin, 128*, 3–72.

Park, H. S., Lee, H. E., & Song, J. A. (2005). I am sorry to send you SPAM. *Human Communication Research, 31*, 365–398.

Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the Rosenberg Self-Esteem scale. *Personality and Social Psychology Bulletin, 27*, 151–161.

Smith, E. R. (1993). Social identity and social emotions: Toward new conceptualizations of prejudice. In D. M. Mackie, & D. L. Hamilton (Eds.), *Affect, cognition, and stereotyping: Interactive processes in group perception* (pp. 297–315). San Diego, CA: Academic Press.

Smith, C. A., & Ellsworth, P. C. (1985). Patterns of cognitive appraisal in emotion. *Journal of Personality and Social Psychology, 48*, 813–838.

Tajfel, H. (1978). Social categorization, social identity and social comparison. In H. Tajfel (Ed.), *Differentiation between social groups: Studies in the social psychology of intergroup relations* (pp. 61–76). London, UK: Academic Press.

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel, & W. G. Austin (Eds.), *Psychology of intergroup relations* (pp. 7–24). New York, NY: Harper Collins.

Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.

Yzerbyt, V., Dumont, M., Wigboldus, D., & Gordijn, E. (2003). I feel for us: The impact of categorization and identification on emotions and action tendencies. *British Journal of Social Psychology, 42*, 533–549.