Article

Affect and Morality: A Cross-Cultural Examination of Moral Attribution

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Abstract

Principles of attribution do not always apply equally in all cultures. In the present research, we use the Kantian approach of perfect and imperfect duty violations to assess how attributions are made in the United States and Korea. Perfect duties are actions that moral people are required to do, whereas imperfect duties, although not required, are actions expected of moral people. In Experiment 1, we assessed whether there were cross-cultural differences in response to perfect and imperfect duty violations. In Experiment 2, we explored the mediating role of affect in these differences. In Experiment 3, we manipulated affect to test alternative explanations for the results of Experiment 2. Results show that the process of making moral attributions differs between Americans and Koreans, and this difference is due to Koreans requiring comparatively more negative affect before making a moral attribution. Implications for cross-cultural research are discussed.

Keywords

cultural psychology, social cognition, emotion, morality

When we encounter others, we make attributions about their traits based on their behaviors. Principles of attribution, however, do not always apply equally to all cultures (Nisbett, 2003; Nisbett & Miyamoto, 2005; Nisbett, Peng, Choi, & Norenzayan, 2001). One especially important area of attribution to study cross-culturally is that of moral attribution. There have been several studies examining morality (Miller, 1994) and attribution (Miller, 1997) cross-culturally, but very few have examined moral attribution cross-culturally. Of the studies that *have* been done, most have focused on context only (e.g., Norenzayan, Choi, & Nisbett, 2002), as opposed to disentangling the contribution of multiple factors in moral attribution. Thus, the goal of the present research is to better understand how trait attributions of moral behaviors differ between Koreans and Americans.

There are several reasons why it is important to identify the ways in which culture affects attributions of morality. First, as cultures become globalized and thus intersect more, cross-cultural understanding of people from other cultures becomes more important. Second, the belief that people from different cultural backgrounds would behave the same way is an oversimplified characterization of

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the world, and it is important to reveal the nuances of how different cultures approach moral attribution. Finally, examining differences in social structures of different cultures may lead to the discovery of vastly different mechanisms of making moral attributions (Tomeh, 1968).

To accomplish our goals, we conducted three experiments examining the differences in making moral attributions between Far East Asia (Koreans) and North America (Americans). In Experiment 1, we investigated how moral attributions operate in the United States and Korea. In Experiment 2, we examined the role of affect in making moral attributions by Koreans and Americans. In Experiment 3, we manipulated participant affect to test alternative explanations for the results of Experiment 2. We close with a discussion of the implications of our findings for cross-cultural theories of moral attribution.

Cross-Cultural Attribution and Morality

Traditionally, attribution theorists have focused on assessments of the situation (external) and the dispositional traits of the actor (internal) when explaining people's behavior (Jones et al., 1972). Trafimow and Trafimow (1999) later introduced the notion of perfect and imperfect duties to explain moral attributions among Americans. The distinction between perfect and imperfect duties dates back to Immanuel Kant (1797/1991). According to Kant, perfect duties, such as honesty, are absolute and universal: All rational and moral people are forbidden to lie, without exception. Even one instance of such a violation can damage a person's moral standing. By contrast, an imperfect duty, such as charitability, is different from honesty; even if a person is not charitable at a given time, it does not necessarily mean that that person is uncharitable. In other words, imperfect duties may be violated occasionally with little to no consequences to the violator's moral status. Applying Kant's distinction to attribution, Trafimow and Trafimow (1999) showed that, in the United States, more moral violations were required for imperfect than perfect duties to override a positive impression. In other words, perfect duty violations carried what we refer to as a *greater attributional weight* than imperfect duties, and thus Americans made stronger attributions about perfect duty violations relative to imperfect duty violations.

However, some researchers (Chiu, Dweck, Tong, & Fu, 1997; Haidt, Roller, & Dias, 1993) suggested that morality (specifically, moral behavior, action, or belief) is different across cultures, and as a result, moral attributions are made differently across cultures. Moreover, *culture* is an intricate concept. According to Kuper, culture is "a matter of ideas and values, a collective cast of mind" (Kuper, 1999, p. 227). Much evidence suggests that psychological processes differ across cultures (Lehman, Chiu, & Schaller, 2004). Nisbett et al. (2001) suggested that the cultural differences between Eastern and Western cultures arise from different social systems between those cultures. They argued that Asians use a holistic cognition whereby they tend to focus on the entire field (or environment) and its nuances, whereas Americans use a more analytic type of cognition, focusing on the target (object) itself. As a result, Westerners use felt affect in response to targets' behavior to make attributions (Trafimow, Bromgard, Finlay, & Ketelaar, 2005) whereas Easterners may find it difficult to separate the object from the environment when making attributions, and therefore not focus solely on a target's action. Thus, when Koreans make attributions based on people's behaviors, they may not make strong attributions due to lack of situational information. Conversely, Americans may focus on the target's behavior rather than the target's situational constraints when making attributions. This idea is supported by research showing that people from interdependent cultures are more context-dependent in nature (Norenzayan et al., 2002). Another study (Choi & Nisbett, 2000; Nisbett et al., 2001) revealed that people from different cultures show differences in the way they direct their attention to the situations related to the action in question. These studies suggest that Easterners focus on the situation rather than their own personally felt affect in making attributions. As suggested above, the traditional view in the field of cross-cultural psychology is based on the assumption that Asians rely more on

context to make attribution relative to Americans. As a result, there is a gap in the literature concerning the way that Asians, when given the opportunity, use affect as information in making attributions. Our goal, then, is to determine how personal constructs such as affect influence the way that people from different cultures make attributions about moral violations.

It is a cross-cultural truism that psychological principles that operate in independent (sometimes referred to as individualistic) cultures often operate differently (or nor at all) in interdependent (sometimes referred to as collectivistic) ones. This may be because interdependent cultures are more context-dependent than are independent cultures (Nisbett, 2003; Nisbett & Miyamoto, 2005; Nisbett et al., 2001). This suggests that the principle that perfect duty violations carry more attributional weight than imperfect duty violations might also work only in independent cultures and not in interdependent ones. Thus, we decided to study the attribution process cross-culturally by adapting Trafimow and Trafimow's method (1999). We chose to compare South Korea with the United States, which represents an independent culture (Markus & Kitayama, 1991; Nisbett, 2003).

Summary and Hypotheses

In summary, according to the cross-cultural literature, people from interdependent cultures place a heavier emphasis on context than on a target person's behavior. People from independent cultures, however, tend to assume that other people are responsible for their own behavior, and thus assume that a target person's behavior is indicative of his or her traits (Norenzayan et al., 2002; Varnum, Grossmann, Kitayama, & Nisbett, 2010).

Because Koreans do not focus on behavior in making attributions, they should not make strong attributions if they only have behavioral information without accompanying situational information. If this is the case, then a positive impression should not be undermined by moral violations. Specifically, if there is no contextual information accompanying behavior, Koreans should hesitate to disregard positive impressions, even in cases of perfect duty violations. For Americans, however, the lack of context should prove to be less of a factor, as their attributions should be founded mainly by the target person's behaviors (Norenzayan et al., 2002). Hence, the behaviorally driven attributions that Americans make should be strong enough to override a positive trait, resulting in requiring fewer perfect than imperfect duties to override a positive trait.

Our main hypothesis for Experiment 1, then, is that Americans will make stronger attributions after perfect than imperfect duty violations, whereas Koreans will treat both types of violations equally. To test this hypothesis, we applied the method used by Trafimow and Trafimow (1999) to both Korean and American samples.

Experiment 1

Based on the method of Trafimow and Trafimow (1999), Experiment 1 consisted of U.S. and Korean undergraduates responding to violations of perfect and imperfect duties to determine how moral attributions operate in different cultures. If the distinction between perfect and imperfect duties generalizes across cultures, perfect duty violations should carry more attributional weight than imperfect duty violations in both cultures. However, if this principle is not universal, then Koreans' emphasis on values and interpersonal relationships (Cha, 1980) should result in a failure to differentiate between perfect and imperfect duty violations. Americans, however, should treat perfect and imperfect duties differently.

Method

Participants. Participants were 52 undergraduate students (20 male and 32 female) from a large national university in South Korea and 52 students (13 male and 39 female) from a medium-sized

Table 1. Number of Moral Violations Needed in to Overturn a Favorable Impression in Experiment 1.

	US		Korea	
	M	*SD*	*M*	*SD*
Perfect	1.73_c	0.78	2.91_a	1.33
Imperfect	2.90_a	1.46	2.88_a	1.22

Note. N_{US} = 52 and N_{Korea} = 52. Nonconsecutive subscripts (e.g., a & c) denote statistical significance at the .05 level.

southwestern state university in the United States. The U.S. sample was 50% Hispanic, 37% Caucasian, and 13% of other ethnicity (East Asians were excluded). All were volunteers. The average age was 20.0 years (*SD* = 2.52) for Koreans and 19.8 years (*SD* = 1.84) for Americans.

Procedure. Four scenarios were presented to each participant. Two pertained to perfect duties (honesty and loyalty) and two pertained to imperfect duties (friendliness and charitableness). The scenarios were presented as follows, "Suppose that you have reason to believe that Leslie is [honest, loyal, friendly, charitable]. How many [dishonest, disloyal, unfriendly, uncharitable] behaviors would Leslie have to perform to change your impression?" After each scenario, participants wrote the number of moral violations needed to override the previous positive impression (e.g., the number of dishonest behaviors needed to overcome the prior trait impression that the person is honest). Participants could write any number they chose, but participants responding with answers indicative of inattention to the questions were eliminated (e.g., zero, one million). Scenarios were translated into Korean for Korean participants, and *Leslie* was replaced with *Aram*, a common Korean name.

The scenarios were presented in a Latin Square order to control for serial position effects. The experimental design was a 2 × 2 mixed factorial design, including a between-participants factor (Country: Korea vs. United States) and a within-participants factor (Violation type: violation of a perfect or imperfect duty), with two replications within each type of duty violation. The dependent measure was the number of dishonest, disloyal, uncharitable, or unfriendly behaviors that participants reported would be needed to override the positive trait impression that the target person was honest, loyal, charitable, or friendly, respectively.

Results and Discussion

An initial chi-square test revealed no significant differences in gender ratio, or effects of sex, alone or in interaction with any other variable. The data were submitted to a two-way Country × Violation type mixed ANOVA (see Table 1). Consistent with Trafimow et al. (2005), we found that perfect duty traits (honesty and loyalty) and imperfect duty traits (friendliness and charitableness) correlated within duty type. In Experiment 1, results showed that perfect duty traits were significantly correlated for both countries: $r_{Korea} = .28$, $p = .042$, and $r_{US} = .33$, $p = .017$. For imperfect duties, traits were marginally significant for both country: $r_{Korea} = .26$, $p = .067$, and $r_{US} = .25$, $p = .070$. There were no significant effects involving violations within each Violation type (dishonest versus disloyal and uncharitable versus unfriendly), so these were averaged. There was a main effect for Country, such that more moral violations were required by Koreans than by Americans to override positive trait impressions ($M_{Korea} = 2.89$, $SD = 1.26$ and $M_{US} = 2.33$, $SD = 1.16$), $F(1, 102) = 7.82$, $\eta_p^2 = .071$, $p < .01$. There also was a main effect for violation type. Consistent with previous research, perfect duty violations carried more attributional weight than did imperfect duty violations such that fewer perfect than imperfect duties were required to override a previous trait impression ($M_{perfect} = 2.32$, $SD = 1.08$ and $M_{imperfect} = 2.90$, $SD = 1.33$),

$F(1, 102) = 20.06$, $\eta_p^2 = .164$, $p < .001$. Importantly, there was a Country × Violation type interaction such that $F(1, 102) = 22.83$, $F(1, 102) = 22.83$, $\eta_p^2 = .183$, $p < .001$. Consistent with previous research (Trafimow & Trafimow, 1999), there was a strong effect whereby fewer perfect than imperfect duty violations were necessary to override positive trait impressions in the United States ($M_{\text{perfect}} = 1.73$, $SD = 0.78$ and $M_{\text{imperfect}} = 2.92$, $SD = 1.46$), $t(51) = 6.62$, $\eta_p^2 = .462$, $p < .001$. However, in the Korean sample, the difference was not statistically significant ($M_{\text{perfect}} = 2.91$, $SD = 1.33$ and $M_{\text{imperfect}} = 2.88$, $SD = 1.22$), $t(51) < 1$, $\eta_p^2 = .001$. In contrast to Americans, Koreans did not place greater attributional weight on violations of perfect than imperfect duties.

According to these findings, it appears that Koreans do not attribute moral violations in the same manner as Americans, contradicting the notion that the distinction between perfect and imperfect duties is universal (Kant, 1797/1991). There are two possible explanations for these results. It may be the case that Koreans do not use behavior as information to make attributions, nor do they use negative affect resulting from the target's moral violations (behavior) to make moral attributions. Specifically, even if Koreans felt negative affect in response to moral violations, they did not use it to make moral attributions. Another possibility is that Koreans and Americans have different moral standards. For example, there is evidence that people from different cultures consider different behaviors to be moral or immoral (Shweder, Mahapatra, & Miller, 1987; Miller, 1994). As such, Koreans may not consider perfect duties to be as immoral as do Americans and, accordingly, did not feel negative affect in response to perfect duty violations.

However, having a different view of behaviors may not be the same as having different moral standards (e.g., For Koreans, dishonesty is not as immoral as it is to Americans). Thus, Koreans may not have made as strong of moral attributions as Americans in response to moral violations. To eliminate this alternative explanation, we conducted a follow-up study to assess the standards of each type of immorality (dishonesty, disloyalty, unfriendliness, and uncharitableness). We asked Koreans ($n = 44$) and Americans ($n = 18$) to rate how immoral the four moral values (dishonesty, disloyalty, unfriendliness, and uncharitableness) were on a 6-point Likert-type scale (0 to 5). Results showed that both cultures consider perfect duty violations (dishonesty, disloyalty), $t_{\text{perfect}}(60) = 0.70$, $p = ns$, and imperfect duty violations (unfriendliness, uncharitableness), $t_{\text{imperfect}}(60) = 0.64$, $p = ns$, as immoral; both Koreans, $t_{\text{Korea}}(43) = 3.10$, $p < .001$, and Americans, $t_{\text{US}}(17) = 3.23$, $p < .001$, considered perfect duty violations to be significantly more immoral than imperfect duty violations. This suggests that there were no significant differences in moral standards between Korea and the United States.

According to the follow-up study, Koreans and Americans displayed similar moral standards, yet still made moral attributions differently, leaving the explanation that Koreans do not use negative affect in making attributions. Experiment 2 was designed to test this explanation by using the method of Trafimow et al. (2005). Based on the results of Experiment 1 and Trafimow et al. (2005), we devised two directional hypotheses. First, it may be the case that Koreans do experience negative affect, but they do not use it to make moral trait attributions. Alternatively, it may be the case that Koreans do not experience negative affect in response to moral violations in the same way that Americans do. To test these hypotheses, we conducted Experiment 2 to investigate the role of affect in the results of Experiment 1.

Experiment 2

Clore, Gasper, and Garvin (2001) demonstrated that people use affect as information when making a variety of judgments. Schwarz and Clore (1983) suggest that affective states serve both informational and directive functions. Specifically, people use their affect as information to make various types of judgments; people may try to specify the possible cause of their mood. Moreover, mood may increase the availability of mood-congruent thoughts or information. Schwarz and

Clore found that people use their momentary affective states as information to evaluate general happiness or satisfaction with their lives, and people in unpleasant situations search for and use information to explain their state more than people who are in pleasant situations.

Based on Clore and colleagues' theory, Trafimow et al. (2005) hypothesized that people may use their own negative affect as information to make attributions and found that Americans did use affect as information on which to base moral attributions. According to Trafimow et al. (2005), people make moral trait attributions based on negative affect in response to moral violations. Specifically, others' moral violations induce negative affect in observers, which in turn influences observers' attributions about their behavior. Given that perfect duties have more attributional weight than imperfect duties (Trafimow & Trafimow, 1999; Trafimow et al., 2005), perfect duty violations should cause more negative affect than imperfect duty violations. In particular, participants in the United States changed their previous impressions about moral trait attributions based on negative affect stemming from moral violations.

To test the role of negative affect in attributions in both Korea and the United States, we replicated Experiment 1, but measured affect as well. We hypothesized that, as in Experiment 1, perfect duty violations should carry more attributional weight (i.e., cause more negative affect resulting in stronger attributions) than imperfect duty violations in the United States, but not in Korea. Regarding affect, Trafimow et al. (2005) found that a sample of Americans felt more negative affect in response to perfect duty violations compared with imperfect duty violations, thus requiring less moral violations to change their previous impression for perfect duty violations compared with imperfect violations. If this also holds for Koreans, both perfect duty violations and imperfect duty violations should induce similar amounts of negative affect for Koreans, because they did not differentiate between perfect and imperfect duty violations when making moral attributions.

Method

Participants. Participants were 59 students (22 male and 37 female) from a large national university in South Korea and 59 students (17 male and 42 female) from a medium-sized southwestern state university in the United States (the U.S. sample was 54% Hispanic, 34% Caucasian, 12% of other ethnicity; East Asians were excluded). All were volunteers. The average age of Koreans was 20.8 years, $SD = 2.64$, and the average age of Americans was 19.6 years, $SD = 2.05$.

Procedure. The procedure and design were identical to those in Experiment 1 except for one difference: In addition to the attributional weight measure for each scenario, participants also completed an affect rating for each scenario. Participants rated their affect on a 7-point scale ranging from −3 (*extremely negative*) to +3 (*extremely positive*) indicating how negative or positive each violation made them feel. 0 was neutral.

Results and Discussion

Attributional weight. An initial chi-square test revealed no significant differences in gender ratio, or effects of sex, alone or in interaction with any other variable. In Experiment 2, both perfect (honesty and loyalty) and imperfect duty (friendliness and charitableness) traits were significantly correlated within duty type. Perfect: $r_{Korea} = .58$, $p < .001$, and $r_{US} = .44$, $p < .001$. Imperfect: $r_{Korea} = .40$, $p = .002$, and $r_{US} = .49$, $p < .001$. There were no significant effects involving violations within each Violation type (dishonest vs. disloyal and uncharitable versus unfriendly), so these were averaged. As in Experiment 1, there was a main effect of Culture; more moral violations were required for Koreans than Americans to override positive trait impressions ($M_{Korea} = 2.95$, $SD = 1.33$ and $M_{US} = 2.47$, $SD = 1.03$), $F(1, 116) = 5.93$, $\eta_p^2 = .049$, $p < .02$. There also was a main

Table 2. Number of Moral Violations Needed in to Overturn a Favorable Impression in Experiment 2.

	US		Korea	
	M	*SD*	*M*	*SD*
Perfect	2.11_c	0.87	2.84_a	1.34
Imperfect	2.82_a	1.18	3.05_a	1.34

Note. N_{US} = 59 and N_{Korea} = 59. Nonconsecutive subscripts (e.g., a & c) denote statistical significance at the .05 level.

Table 3. Negative affective responses to duty violations in Experiment 2.

	US		Korea	
	M	*SD*	*M*	*SD*
Perfect	-1.34_c	1.12	-1.19_c	1.06
Imperfect	-0.74_a	1.00	-0.78_a	1.10

Note. N_{US} = 59 and N_{Korea} = 59. Nonconsecutive subscripts (e.g., a & c) denote statistical significance at the .05 level.

effect of violation type; perfect duty violations carried more attributional weight than did imperfect duty violations ($M_{perfect}$ = 2.48, *SD* = 1.18 and $M_{imperfect}$ = 2.93, *SD* = 1.26), $F(1, 116) = 21.15$, $\eta_p^2 = .154$, $p < .001$. Finally, there was a Country × Violation type interaction, $F(1, 116) = 6.10$, $\eta_p^2 = .050$, $p < .02$. As in Experiment 1, perfect duties carried more attributional weight than did imperfect duties for Americans ($M_{perfect}$ = 2.11, *SD* = .87 and $M_{imperfect}$ = 2.82, *SD* =1.18), $t(58) = 4.65$, $\eta_p^2 = .271$, $p < .01$. But in Korea, as in Experiment 1, this simple effect was not present ($M_{perfect}$ = 2.84, *SD* = 1.34 and $M_{imperfect}$ = 3.05, *SD* = 1.34), $t(58) = 1.64$, $p > .1$, $\eta_p^2 = .044$ (see Table 2).

Negative affect. An initial chi-square test revealed no effects of sex, alone or in interaction with any other variable. There was no main effect of Country on affect ratings $F(1, 116) < 1$, $\eta_p^2 = .001$. However, there was a main effect of Violation type whereby more negative affect was expressed in response to perfect than imperfect duty violations ($M_{perfect} = -1.26$, *SD* = 1.09 and $M_{imperfect} = -.76$, *SD* = 1.04), $F(1, 116) = 39.27$, $\eta_p^2 = .253$, $p < .001$. The Violation type main effect was not qualified by a Country × Violation type interaction, $F(1, 116) = 1.47$, $\eta_p^2 = .012$, $p > .2$.

The data pertaining to the attributional weight of violations of perfect versus imperfect duties, as well as affective responses to these two types of violations, were submitted to two-way Country × Violation type mixed ANOVAs. As in Experiment 1, we averaged across violations (dishonest and disloyal behaviors or uncharitable and unfriendly behaviors). The findings pertaining to each dependent variable are presented in separate subsections. These results support our second hypothesis, which is that Koreans reported a similar level of negative affect to Americans, but Koreans did not use their negative affect in making moral attributions (see Tables 2 and 3).

Finally, we performed path analyses per Trafimow et al. (2005) to determine whether affect partially mediated moral attribution in response to moral violations in the United States and Korea. First, the U.S. sample results replicated those of Trafimow et al. (2005) in that both indirect and direct pathways were significant (see left panel of Figure 1). The type of behavior significantly predicted both affect and trait attributions (mean correlations were .27 and .27 respectively, $p < .01$, in both cases), and affect predicted trait attributions (mean correlation was .25). Although Experiment 2 was designed to test for the effects of the Violation type manipulation on the dependent measures, and was not set up for mediation analyses, we nevertheless

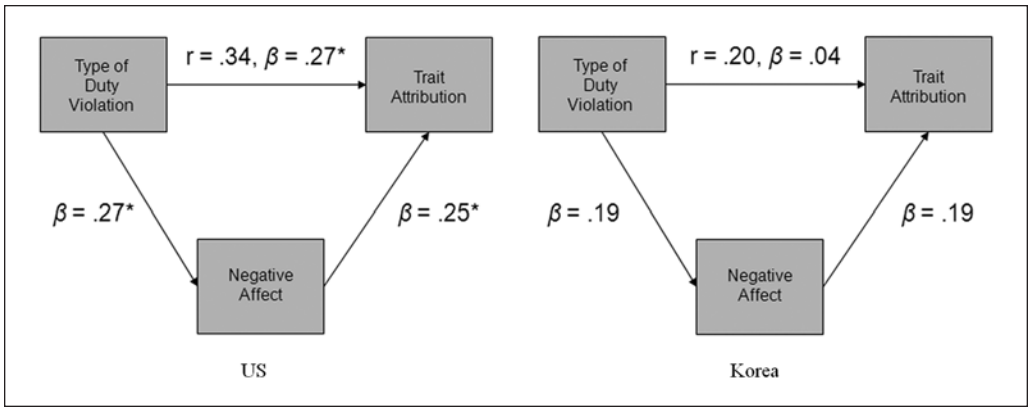

Figure 1. Tests of negative affect mediating the relationship between duty violation type and trait attributions.
*$p < .05$.

tested for mediation. Not surprisingly, given that our sample size was well short of that recommended by Fritz and MacKinnon (2007) for providing sufficient power to detect mediation, we did not obtain a statistically significant mediation effect via the Sobel test. The 95% confidence interval for the estimated indirect effect was [0.00, 0.18]. However, for Koreans, the type of behavior did not predict affect and trait attributions (mean correlations were .04 and .19 respectively, $p = ns$, in both cases), and affect did not predict trait attributions (mean correlation was .19). The results of the Korean sample did not replicate those of the American sample (see right panel of Figure 1).

There are at least two explanations for the results of Experiment 2. First, it is possible that although negative affect endows duty violations with attributional weight in the United States (Trafimow et al., 2005), negative affect is irrelevant to attributional weight in Korea. Second, Koreans may use negative affect in making moral attributions, but withhold making a moral attribution until they have a large enough pool of information (i.e., situational or dispositional information related to the moral violation), to make such an attribution.

To determine which of these explanations is more plausible, we designed Experiment 3 to see how negative affect would influence attribution processes among Koreans. According to Trafimow et al.'s findings (2005), when Americans were induced with negative affect, they treated imperfect duty violations as perfect duty violations and Americans made harsher attributions about imperfect duty violations as they did about perfect duty violations. If Koreans do not use negative affect in making attributions, their decisions about perfect and imperfect duty violations should not differ. However, if Koreans were withholding their moral attributions, they may change their attributions about both imperfect and perfect duty violations when induced with an additional amount of negative affect. Thus, Experiment 3 was conducted to determine how Americans and Koreans would respond to moral violation when extra negative affect was induced (Trafimow et al., 2005).

Experiment 3

Based on Experiments 1 and 2, perfect duty violations carry more attributional weight than imperfect duty violations in the United States, but not in Korea. Furthermore, the results of Experiment 2 rule out a simple affect-based explanation that perfect duty violations induce more negative affect than imperfect duty violations in the United States, but not in Korea. The Violation

type main effect that was not qualified by Country suggests that perfect duty violations induce more negative affect than do imperfect duty violations in both cultures. Thus, with a simple, affect-based explanation ruled out, are there any other possibilities?

We believe that there are at least two remaining possibilities. The most intuitive explanation, the affect irrelevancy hypothesis, is that although negative affect endows duty violations with attributional weight in the United States (Trafimow et al., 2005), negative affect is irrelevant to attributional weight in Korea. A potential implication of this explanation is that Koreans weigh evidence more carefully than Americans (as the results of Experiment 2 suggest that Koreans do not rely on affect to make moral attributions). There also is a second, more complicated possibility, the decision withholding hypothesis. Suppose that both Koreans and Americans (a) recognize that perfect duty violations weigh more heavily than imperfect duty violations and (b) experience more negative affect in response to perfect than imperfect duty violations. It is possible that Koreans withhold or delay their attributions instead of immediately making them based only on the affect they feel in response to others' moral violations. Consider that it is socially undesirable in interdependent cultures to make strongly negative conclusions about others (Gudykunst & Ting-Toomey, 1988). Consequently, Koreans may need extra information (in the form of more negative affect) before drawing conclusions about a person's dishonesty or disloyalty, whereas Americans may not. This explanation assumes that Koreans, like Americans, feel more negative affect in response to perfect than imperfect duty violations. However, Koreans require a greater amount of negative affect than do Americans before being willing to override a positive expectation based on perfect, but not imperfect, duty violations. Given this, it is possible that both perfect and imperfect duty violations resulted in approximately equal attributional weight for the two kinds of violations in Korea.

How can these two possibilities—the affect irrelevancy hypothesis and the decision withholding hypothesis—be distinguished from each other? In Experiment 3, we manipulated negative affect by having participants read a tragic or neutral story before being presented with perfect and imperfect duty violations. Based on research by Trafimow et al. (2005), the predictions for Americans are intuitive. Trafimow et al. (2005) showed that participants who were presented with a tragic story before being exposed to duty violations misattributed some of the negative affect from the tragic story to the duty violations, thereby causing more negative affect to be associated with those duty violations. However, perfect duty violations already carry a high amount of attributional weight, so it should be difficult or impossible to endow them with any additional attributional weight, and consequently the story manipulation should have little effect on the attributional weight of perfect duties. In contrast, imperfect duty violations carry less attributional weight, so it is possible to endow them with more weight. Therefore, when Americans read a tragic story and misattribute some of the induced negative affect to duty violations, the induced negative affect should endow the imperfect duty violations with more attributional weight than in the neutral story condition.

For Koreans, the predictions are different based on the affect irrelevancy hypothesis or the decision withholding hypothesis. According to the affect irrelevancy hypothesis, misattributing negative affect from the tragic story to the duty violations should have no effect on attributional weight, whereas according to the decision withholding hypothesis, such misattribution should increase the attributional weight of all duty violations. In summary, then, there should be an interaction for Americans whereby perfect duty violations have more attributional weight than do imperfect duty violations in the neutral story condition, but this difference should attenuate in the tragic story condition. For Koreans, depending on whether the affect irrelevancy hypothesis or the decision withholding hypothesis applies, there should be either no effect or a general main effect whereby the tragic story endows all duty violations with more attributional weight relative to when the story is neutral, respectively.

Method

Participants. The U.S. sample consisted of 72 undergraduates (33 males and 39 females) from a medium size state university in the southwestern United States. (The U.S. sample was 42% Hispanic, 40% Caucasian, and 18% of other ethnicity; East Asians were excluded). The Korean sample consisted of 122 students (41 males and 81 females) from a large national university in South Korea. The average age of Americans was 19.0 years, $SD = 4.03$ and the average age of Koreans was 20.5 years, $SD = 2.07$.

Procedure. In Experiment 3, 24 participants (7 male and 17 female) from the United States and 24 participants (10 male and 14 female) from Korea read a tragic and a neutral newspaper article.[1] The articles were translated into Korean for the Korean participants and the translation was double checked by two assistants fluent in both languages. Affect was measured before and after each article. As expected, the difference between pretest and posttest was larger for the tragic article than for the neutral one (mean differences are 1.50 and 0.57, respectively), $F(1, 43) = 7.02$, $p < .02$, and this effect was not qualified by nationality.

With the assurance that the tragic article induced more negative affect than the neutral article, we proceeded with their use in the main experiment. The American and Korean participants were exposed to one of the two articles, and then all participants responded to the four scenarios pertaining to perfect or imperfect duties. Thus, with the exception of the affect manipulation, the remainder of Experiment 3 was similar to Experiment 1. The design was a 2 (Article type: tragic or neutral) × 2 (Country: Korea or US) × 2 (Violation type: perfect or imperfect duty violation) × 2 (Replication: there were two perfect and two imperfect duty violations) mixed design with the last two factors manipulated within participants. As in Experiment 1, the dependent measure was the number of moral violations participants indicated would be needed to override a previous positive impression.

Results and Discussion

An initial chi-square test revealed no significant differences in gender ratio, or effects of sex, alone or in interaction with any other variable. We again tested perfect duty traits and imperfect duty traits. Both perfect (honesty and loyalty: $r_{\text{Korea}} = .63$, $p < .001$, and $r_{\text{US}} = .51$, $p < .001$) and imperfect duty (friendliness and charitableness: $r_{\text{Korea}} = .50$, $p < .001$, and $r_{\text{US}} = .45$, $p < .001$) traits were significantly correlated within duty type. There were no significant effects involving violations within each violation type (dishonest vs. disloyal and uncharitable vs. unfriendly), so these were averaged. As in the previous experiments, the replication factor did not figure into any main effects or interactions, so the data were averaged across replications and analyzed using a three-way 2 (Article type: tragic or neutral) × 2 (Country: Korea or US) × 2 (Violation type: perfect or imperfect duty violated) mixed ANOVA. There was a main effect for Article type such that fewer duty violations were necessary to override a previous positive impression in the tragic than in the neutral condition ($M_{\text{tragic}} = 2.78$, $SD = 1.47$ and $M_{\text{neutral}} = 3.37$, $SD = 1.99$), $F(1, 190) = 6.91$, $\eta_p^2 = .035$, $p < .01$. There was also a main effect of Country such that fewer duty violations were necessary to override a previous positive impression in the United States than in Korea ($M_{\text{US}} = 2.68$, $SD = 1.63$ and $M_{\text{Korea}} = 3.30$, $SD = 1.80$), $F(1, 190) = 7.69$, $\eta_p^2 = .039$, $p < .01$. Finally, there also was a main effect of Violation type such that fewer perfect than imperfect duty violations were necessary to override a previous positive impression ($M_{\text{perfect}} = 2.85$, $SD = 1.75$ and $M_{\text{imperfect}} = 3.28$, $SD = 1.80$), $F(1, 190) = 19.34$, $\eta_p^2 = .092$, $p < .001$.

The main effects were qualified by interactions. As in Experiments 1 and 2, there was a two-way Country × Violation type interaction, $F(1, 190) = 9.32$, $\eta_p^2 = .047$, $p < .01$, such that Americans assigned perfect duty violations more attributional weight than imperfect duty violations ($M_{\text{Perfect}} = 2.23$, $SD = 1.41$ and $M_{\text{Imperfect}} = 3.12$, $SD = 1.85$), but this effect was attenuated for Koreans

Table 4. Number of Moral Violations Needed in to Overturn a Favorable Impression in Experiment 3.

	US						Korea					
	Tragic article			Neutral article			Tragic article			Neutral article		
	M	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*
Perfect	2.16_e	1.54	36	2.31_d	1.28	36	2.89_d	1.40	62	3.56_a	2.14	60
Imperfect	2.59_d	1.68	36	3.65_a	1.87	36	3.14_c	1.29	62	3.63_a	2.15	60

Note. N_{US} = 72 and N_{Korea} = 122. Nonconsecutive subscripts (e.g., a & c) denote statistical significance at the .05 level.

($M_{Perfect}$ = 3.22, SD = 1.83 and $M_{Imperfect}$ = 3.38, SD = 1.77). More important, however, a three-way interaction between article type, Country, and Violation type qualified all of the foregoing effects, $F(1, 190) = 5.27$, $\eta_p^2 = .027$, $p < .03$. Table 4 illustrates this interaction that can be most easily understood by considering Americans and Koreans separately. For Americans, there was a two-way pattern that replicated the finding of Trafimow et al. (2005), whereby the established difference between perfect and imperfect duty violations was found for the neutral story condition but attenuated in the tragic story condition, $F(1, 70) = 5.58$, $\eta_p^2 = .074$, $p < .03$. In essence, the tragic story endowed imperfect duty violations with increased attributional weight so that fewer of them were necessary to override a previous positive impression. Perfect duty violations were relatively immune to this effect. In contrast, this two-way pattern failed to materialize for Koreans, $F(1, 120) < 1$. Instead, there was a main effect whereby the tragic article endowed the perfect and imperfect duty violations with increased attributional weight so that fewer of them were necessary to override a previous positive impression, $F(1, 120) = 4.09$, $\eta_p^2 = .033$, $p < .05$. Therefore, the data support the decision withholding hypothesis and contradict the affect irrelevancy hypothesis.

Discussion

The goal of the present research was to determine whether different cultures use different moral attribution processes. The results of Experiment 1 supported this claim. A possible explanation for the results of Experiment 1 is that perfect duty violations resulted in more negative affect than did imperfect duties for Americans, but not for Koreans. However, the results of Experiment 2 disconfirmed this explanation: There was more negative affect associated with perfect than imperfect duty violations for both Americans and Koreans. The results for Americans replicated the two-way interaction obtained by Trafimow et al. (2005): While Americans required fewer perfect than imperfect duty violations to override a previous impression, perfect duty violations elicited more negative affect from them. Koreans, however, did not differentiate between perfect and imperfect duty violations, but felt more negative affect in response to perfect than imperfect duty violations, much like Americans. Although Americans and Koreans experienced a similar increase in negative affect in response to moral violations, it seemed that only Americans used their negative affect in making moral attributions. Thus, Experiment 3 was designed to test the affect irrelevancy hypothesis and the decision withholding hypothesis by using a paradigm designed to endow duty violations with additional negativity. While we replicated the two-way interaction obtained by Trafimow et al. (2005) that Americans treated imperfect duty violations as perfect duty violations with extra negative affect, there was also an effect for Koreans whereby negative affect increased the attributional weight carried by both perfect and imperfect duty violations. This suggests that negative affect does matter for Koreans, supporting the decision withholding hypothesis. To reiterate, this hypothesis assumes that Koreans and Americans are similar in that they both associate more negative affect with perfect duty violations than with imperfect

duty violations, and this negative affect endows duty violations with more attributional weight. But Koreans and Americans are dissimilar in that Koreans needed extra negative affect before being willing to make attributions about others' moral violations, whereas this was not so for Americans. Thus, Koreans needed the extra negative affect before making judgments about others, and only then did Koreans give approximately equal attributional weight to perfect and imperfect duty violations.

One possible implication of these results is that Koreans consider judging others socially unacceptable, and it may make them feel unpleasant to make strongly negative (e.g., "That person is dishonest") trait attributions. Consequently, Koreans may base their attribution on the context rather than the person. Thus, it is possible that, as the traditional view suggests (e.g., Norenzayan et al., 2002), when Koreans make attributions based on people's behaviors, they weight the situation more than behaviors. Conversely, Americans would use behavior as information rather than considering the situation. But this hypothesis does not seem to explain the complete picture as Koreans changed their impression about others' moral violations in Experiment 3.

Another implication of the present results is that for Easterners, the information that generates negative affect does not need to be solely situational, but can be dispositional as well. For example, Koreans made changes in their moral attribution once they felt enough negative affect. In other words, if dispositional information satisfies the informational needs of Koreans, they might make attributions based on just dispositional information without accompanying situational information. Specifically, if dispositional information generates enough affect, Koreans would make attributions much like Americans.

The problem with assuming that Easterners do not make dispositional attributions is that that assumption overlooks the perception of behavioral intent. Traditionally, it was considered that there are two primary elements for making attributions about others (the situation and dispositional traits; Jones et al., 1972), and people choose one of these two components on which to base their attributions. Recently, however, it has been suggested that people do not rely solely on these two primary elements for making attributions about others (Reeder, Vonk, Ronk, Ham, & Lawrence, 2004). Instead, the situation, target behavior, target traits, and the perceived intention of the target can all be used in making attributions (Reeder et al., 2004). They suggest that people use multiple inferences to make attribution, which means that the attribution process is not just a dichotomous process. Rather, people choose the most salient factor among many that are given to them. It seems that the decision withholding hypothesis corroborates this trend in the field of attribution. Koreans might be more sensitive in making multiple inferences; whether this is due to context or an increase in affect, it seems that Koreans need more information to make attributions compared with Americans.

Limitations and Directions for Future Research

A possible limitation of the present research is that we used generalized scenarios rather than specific behaviors. For example, participants were just asked about "dishonest behaviors" in general rather than being presented with specific examples of dishonesty (e.g., lying on one's tax return). Trafimow et al. (2005) used generalized scenarios and specific behaviors and obtained similar findings for Americans, which should assuage this concern. While it suited the purpose of the present study (which focused on understanding how Easterners use their affect—without context), the results may have been different had we used specific behaviors. Therefore, it remains possible that although generalized scenarios and specific behaviors work similarly for Americans, they work dissimilarly for Koreans. We can further explore this idea in future research. Norenzayan and his colleagues (2002) tested context, but did not separate individual inferences from context. Thus, it is possible that context reflects both situational information and the observer's perception of the target's intention. Therefore, it is possible that context could

contain sufficient information for Eastern Asians to make an attribution. This supports that Eastern Asians and Westerners may have a different mechanism in making moral attributions. Specifically, Americans tended to focus on behavioral information rather than context when making attributions (Norenzayan et al., 2002); Koreans, however, focused mainly on context rather than behavior when making attributions. According to the present research, Americans' responses were consistent with previous findings. However, the present research suggests that the process of making attributions is not a dichotomous choice between situational or behavioral information for Koreans. They simply need more information. This suggests that Koreans' and Americans' mechanisms are not just opposite from each other, but that they might have fundamentally different mechanisms for making attributions.

A further limitation is that we used only two replications of each violation type. This limits our ability to generalize to violations of perfect and imperfect duties that were not used in the present set of experiments. Future research should involve additional duty violations that were not used here.

In our opinion, the present research provides yet another demonstration of the value of performing cross-cultural research. Cross-cultural psychology is about much more than just showing that a finding that occurs in the West does not replicate in the East. Rather, cross-cultural research provides a strong test of supposedly general theories that mostly tend to be formed on the basis of Western thinking or on the basis of data that were obtained in the West. The present findings are particularly interesting along this line. When asked about morality, Americans and Koreans gave very similar answers, with perfect duty violations being judged to be worse than imperfect duty violations in both cultures. But this similarity fails to tell the whole story as we found that the attributional processes by which perfect duty violations gain attributional weight differ widely in the two cultures. Therefore, the present research is interesting not only with respect to the specific attributional mechanisms that were investigated, but also with respect to illustrating generally why it is worthwhile for researchers to invest the extra effort necessary to perform cross-cultural research.

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Note

1. Prior to Experiment 3, we performed a pilot study to ensure that the tragic story (about an Amish school shooting) was more tragic than the neutral story (about the construction of a bridge in Kansas). Both tragic (negative affect induction) and neutral articles (control) were selected from newspapers as in Trafimow, Bromgard, Finlay, and Ketelaar (2005). After a baseline mood assessment, participants read the tragic or neutral articles, and then completed a postarticle mood measurement. Both Korean and American participants showed an increase in negative affect in response to the tragic article, and no changes after reading the neutral article.

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