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### **AFFECT, EMOTION, AND CROSS-CULTURAL DIFFERENCES IN MORAL ATTRIBUTIONS**

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#### **ABSTRACT**

*We assessed whether the quality of negative emotion in response to moral violations differs between Koreans and Americans. We assessed the strength of four negative emotions in response to moral violations, measured which was felt most saliently, and measured attributions based on those moral violations. In response to perfect duty violations, Koreans felt less negative emotion than Americans. There were no cultural differences for imperfect duty violations. Consistent with previous findings, Koreans' attributions did not differ between the two violation types, whereas Americans' did. Results contribute by supporting decision withholding theory, and highlighting the importance of context in attribution research.*

#### **INTRODUCTION**

Due to the increasing amount of globalization taking place in the last several decades, understanding cross-cultural differences in attribution has become increasingly important (Markus & Kitayama, 1991; Triandis, 1999). In exploring cross-cultural differences in moral attribution, An and Trafimow (2014) found that Koreans and Americans reported feeling a similar amount of negative affect in response to moral violations, yet Americans varied their moral attributions based on the type of moral violations made, whereas Koreans did not. This suggests that differences in felt negative affect in response to moral violations were not directly responsible for cross-cultural differences in attribution. Instead, An and Trafimow (2014) cited differences in the amount of information that participants from each culture needed before making attributions as the cause of this effect. They suggest that the cross-cultural difference in attribution is grounded not in differences in the use of situational information, but in the fact that Easterners tend to collect more information before making attributions than do Westerners.

Thus, the question of the mechanism of this difference in attribution (despite feeling similar negative affect) arises. The answer may lie in the difference between affect and emotion (Wundt 1897, 1998; Titchener, 1909; Schachter & Singer, 1962; Mandler, 1975; Leary, 2001; Frijda, 1993; Russell, 2003; Barrett, 2006; Russell & Barrett, 1999; Barrett & Russell, 1999). While affect is an immediate, categorical (i.e., negative or positive) response, emotion is a more developed, complex evaluation of affect. The implication here is that although the affect Koreans and Americans felt was the same, their emotional evaluation while processing attributions may have been different.

The goal of this research, then, is to determine if people from different cultures make moral attributions differently, and if so, whether or not Koreans and Americans feel different negative emotions in response to moral violations. In order to accomplish this goal, we asked Koreans and Americans to rate how much they felt four basic negative emotions (anger, sadness, fear, and disgust; Ekman, 1992) in response to moral violations, to indicate which negative emotion they felt most strongly, and to rate the number of moral violations needed to override a positive impression of the target trait (e.g., “how many honesty violations would it take to damage a person’s moral standing?”). We close with a discussion of the implications of our findings for cross-cultural theories of emotion.

### **Moral Attribution, Culture, and Emotion**

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 & Nisbett, 1972). Trafimow and Trafimow (1999) later introduced the notion of using perfect and imperfect duties as a means 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, imperfect duties may be violated occasionally with little to no consequences to the violator’s moral status. For example, an imperfect duty, such as charity, 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. Applying Kant’s distinction to attribution, Trafimow and Trafimow (1999) showed that, in the United States, more imperfect than perfect duty moral violations were required to override a positive impression of a person. 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. This is consistent with the findings of Clore, Gasper, and Garvin (2001), who found that people use affect as information when making a variety of judgments.

And Trafimow (2014) approached this topic from a cross-cultural perspective. It is traditionally held that, when making attributions, Westerners focus on dispositional information, whereas Easterners focus on situational information (Morris & Peng, 1994; Norenzayan, Choi, & Nisbett, 2002). According to this perspective, Easterners and Westerners might make attributions based on many different sources of information because the collectivistic Easterners process information holistically (i.e., focus on the “bigger picture,” including both personal and situational contexts), whereas the individualistic Westerners process information analytically

(i.e., focus on the persons and personalities involved; Choi & Nisbett, 2000; Nisbett, Peng, Choi, & Norenzayan, 2001; Masuda & Nisbett, 2001). However, An and Trafimow (2014) tested the dispositional attribution processes in the absence of situational information, and found that it is possible for Easterners to make attributions much like Westerners given there is a sufficient amount of information (negative affect, in this case) given to them.

Interestingly, they found that the level of self-reported general negative affect in response to the two types of moral violations was similar for Koreans and Americans, but Koreans did not differentiate between perfect and imperfect duty violations when making moral attributions. In other words, despite reporting similar levels of negative affect in response to moral violations, Americans' moral attributions differed across perfect and imperfect duty violations, and Koreans' did not. This finding leads to the question of why Koreans and Americans made different moral attributions while feeling a similar amount of general negative affect.

Weiner (1982; 1985) suggested that there are two different attribution processes people use. According to his findings, people experience the first, a primitive response which he described as a general negative or positive reaction. Regarding the second process, after making causal judgments, people make a distinct evaluation of their emotions. The question is whether there are cultural differences in this process. According to a review by Buchtel and Norenzayan (2009), Easterners' holistic processing style (Masuda & Nisbett, 2001) results in them requiring more information than Westerners before making attributions. As a result, Easterners tend to make more situational attributions, whereas Westerners tend to make more dispositional attributions (Buchtel & Norenzayan, 2009).

Further, Easterners are more likely than Westerners to feel multiple concurrent emotions (Spencer-Rodgers, Peng & Wang, 2010). For instance, Chinese individuals have a more dialectical thinking style (tolerance of contradiction) compared to Americans, which results in a higher co-occurrence of felt emotions. Miyamoto, Uchida & Ellsworth (2010) tested this in a situational context, and they found that Japanese individuals reported more mixed emotions in response to a predominantly positive situation relative to Americans. However, there were no cultural differences in mixed or negative situations. It is unknown, however, whether this effect would occur if stimuli featured dispositional rather than situational information. It might be possible, in such a case, that Easterners have mixed emotions in response to moral violations. As a result, based on the co-occurring emotion model, the reason Koreans and Americans made different attributions is that Koreans felt different negative emotions in response to moral violations compared to Americans.

## **Overview and Hypotheses**

First, although Koreans and Americans feel similar levels of negative affect in response to moral violations; it is possible that they feel different amounts and types of emotions. As such, this should result in different moral attributions between Koreans and Americans. Another possibility is that the emotions are the same as affect for both Koreans and Americans, and the discrepancy between affect and emotions is not related to why Koreans withheld their attributions.

Second, regarding moral attributions (number of violations needed to override a positive impression), regardless of which explanation is supported, Koreans should not differentiate between perfect and imperfect duties, and Americans should make stronger attributions about perfect than imperfect duty violations, replicating An and Trafimow (2014). Specifically, Americans should require fewer perfect than imperfect duty violations to interpret the target's moral standing as damaged.

## **METHOD**

### **Participants**

Participants were 72 undergraduates. Thirty nine were Americans from a mid-sized state university in the United States (12 male, mean age 18.83,  $SD = 1.31$ ), and thirty three were Koreans from a mid-sized national university in South Korea (20 male, mean age 23.92,  $SD = 2.68$ ). All participated in exchange for class credit.

### **Materials and Procedure**

The experimental design featured a 2 (countries; Korea and the US) x 4 (moral violations; dishonesty, disloyalty, unfriendliness and uncharitableness) mixed participants design. The stimuli featured two perfect (honesty and loyalty) and two imperfect (friendliness and charitableness) moral violations developed by Trafimow, Bromgard, Finlay, & Ketelaar (2005) for the purpose of assessing moral attributions. One set of dependent variables was the four negative emotion ratings (anger, disgust, fear, and sadness) on a 1 (*not at all*) to 7 (*extremely*) Likert-type scale in response to each type of moral violation to investigate the strength of each emotion felt. The next dependent variable was the most saliently felt negative emotion among the four emotions in response to each type of moral violation to investigate an overruling emotion. The final dependent variable was the number of violations needed to override a previous positive moral impression of the target, as in An and Trafimow (2014) in order to replicate the previous findings.

Upon granting consent, participants read four different types of moral violations (honesty, loyalty, friendliness and charitableness). Moral violation scenarios were presented in a Latin square order to reduce order effects. In response to each violation, participants first rated how much each emotion (anger, disgust, fear, and sadness) they felt in response to each moral violation, then chose the most salient emotion among those four, and finally indicated the number of each type of moral violations needed to override a positive impression. All dependent measures were counterbalanced. After completing the study, participants were fully debriefed.

## **RESULTS**

We initially performed a two way repeated measures ANOVA on country (Korea, US), by emotion (anger, disgust, fear, and sadness) for each moral violation type (dishonesty, disloyalty, unfriendliness, and uncharitableness). See Table 1. Second, we performed Chi-square analyses to assess the frequencies of the most salient emotion (anger, disgust, fear, and sadness) felt in response to each type of moral violation. See Table 2. Finally, we performed a two way, repeated

measures ANOVA on country (Korea and the US) by duty violation type (perfect and imperfect) to corroborate the findings of An and Trafimow (2014). See Table 3. See Appendix for correlations and descriptive statistics.

Table 1  
*Negative emotion responses to moral violations*

			Anger		Disgust		Fear		Sadness	
			<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
US	Perfect	Honesty	4.49 <sub>a</sub>	1.78	3.92 <sub>a</sub>	1.61	2.15 <sub>c</sub>	1.39	3.82 <sub>a</sub>	1.83
		Loyalty	4.69 <sub>a</sub>	1.62	4.08 <sub>a</sub>	1.72	2.36 <sub>c</sub>	1.55	4.26 <sub>a</sub>	1.77
	Imperfect	Friendliness	3.49 <sub>a</sub>	1.27	3.41 <sub>a</sub>	1.45	1.92 <sub>c</sub>	1.29	3.74 <sub>a</sub>	1.55
		Charitableness	3.15 <sub>a</sub>	1.65	3.56 <sub>a</sub>	1.93	1.44 <sub>c</sub>	0.72	3.15 <sub>a</sub>	1.83
Korea	Perfect	Honesty	3.30 <sub>a</sub>	1.55	3.00 <sub>a</sub>	1.56	2.30 <sub>a</sub>	1.70	2.30 <sub>a</sub>	1.65
		Loyalty	3.55 <sub>a</sub>	2.02	2.64 <sub>b</sub>	1.54	2.00 <sub>c</sub>	1.39	2.45 <sub>b</sub>	1.84
	Imperfect	Friendliness	3.70 <sub>a</sub>	1.85	2.55 <sub>c</sub>	1.50	2.58 <sub>c</sub>	1.58	3.09 <sub>b</sub>	1.88
		Charitableness	2.15 <sub>a</sub>	1.39	2.64 <sub>a</sub>	1.56	2.21 <sub>a</sub>	1.54	2.52 <sub>a</sub>	1.56

*Note.* N<sub>US</sub> = 39, and N<sub>Korea</sub> = 33. Range 1 to 7. In each row, non-consecutive subscripts (e.g., a & c) denote statistical significance at the .05 level.

Table 2  
*Frequencies of negative emotion responses to moral violations*

			Anger		Disgust		Fear		Sadness	
			<i>N</i>	<i>Percentage</i>	<i>N</i>	<i>Percentage</i>	<i>N</i>	<i>Percentage</i>	<i>N</i>	<i>Percentage</i>
US	Perfect	Honesty	20	51%	6	15%	2	5%	11	29%
		Loyalty	12	31%	14	35%	1	3%	12	31%
	Imperfect	Friendliness	14	36%	7	18%	0	0%	18	46%
		Charitableness	3	8%	17	44%	0	0%	18	46%
Korea	Perfect	Honesty	16	49%	6	18%	5	15%	5	15%
		Loyalty	19	58%	4	12%	5	15%	5	15%
	Imperfect	Friendliness	18	55%	5	15%	3	9%	7	21%
		Charitableness	8	25%	9	27%	4	12%	12	36%

*Note.* N<sub>US</sub> = 39, and N<sub>Korea</sub> = 33.

Table 3  
*Number of moral violations needed in to overturn a favorable impression*

	US		Korea	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Perfect	2.15 <sub>c</sub>	1.34	2.89 <sub>a</sub>	0.99
Imperfect	3.04 <sub>a</sub>	1.79	2.88 <sub>a</sub>	0.84

*Note.* N<sub>US</sub> = 39, and N<sub>Korea</sub> = 33. Non-consecutive subscripts (e.g., a & c) denote statistical significance at the .05 level.

## Country by Emotion Analyses

Dishonesty: Regarding honesty violations, there was a main effect of country,  $F(1, 70) = 10.31$ , partial eta-squared = .13,  $p < .001$ , such that Koreans felt less negative emotion overall compared to Americans. Also, there was a main effect of emotion type,  $F(3, 68) = 19.47$ , partial eta squared = .22,  $p < .001$ , such that participants felt anger most strongly, followed by disgust, sadness, and fear. Mean differences of .83 or greater are significant at the .05 level. These main effects were qualified by a country by emotion interaction,  $F(7, 64) = 5.03$ , partial eta-squared = .07,  $p = .002$ , such that Americans felt anger most strongly, followed by disgust, sadness, and fear. Mean differences of 1.67 or greater are significant at the .05 level. There were no significant differences of emotion among Koreans.

In response to the most salient emotion caused by dishonesty, of the 39 American respondents, 20 chose anger, 11 chose sadness, 6 chose disgust, and 2 chose fear. These frequencies were significantly different than what would be expected by chance, chi-squared (3,  $N = 39$ ) = 18.54,  $p < .001$ . Of the 32 Korean respondents, 16 participants chose anger, 6 chose disgust, 5 chose fear, and 5 chose sadness. These frequencies were also significantly different than what would be expected by chance, chi-squared (3,  $N = 33$ ) = 10.75,  $p = .013$ . However, there were no significant differences between countries. There were no sex differences.

Disloyalty: Regarding loyalty violations, there was a main effect of country,  $F(1, 70) = 18.38$ ,  $\eta^2_{partial} = .21$ ,  $p < .001$ , such that Koreans felt less negative emotion overall compared to Americans. Also, there was a main effect of emotion type,  $F(3, 68) = 23.15$ ,  $\eta^2_{partial} = .25$ ,  $p < .001$ , such that participants felt anger most strongly, followed by disgust, sadness, and fear. These main effects were qualified by a country by emotion interaction,  $F(7, 64) = 3.40$ ,  $\eta^2_{partial} = .05$ ,  $p < .019$ , such Americans felt anger most strongly, followed by sadness, disgust, and fear. Mean differences of 1.72 or greater are significant at the .05 level. For Koreans, the strongest emotion was anger, followed by disgust, sadness, and fear. Mean differences of 1.55 or greater are significant at the .05 level.

In response to the most salient emotion caused by disloyalty, of the 39 American respondents, 14 chose disgust, 12 chose anger, 12 chose sadness, and 1 chose fear. These frequencies were significantly different than what would be expected by chance, chi-squared (3,  $N = 39$ ) = 10.74,  $p = .013$ . Of the 33 Korean respondents, 19 chose anger, 5 chose fear, 5 chose sadness, and 4 chose disgust. These frequencies were significantly different than what would be expected by chance, chi-squared (3,  $N = 33$ ) = 18.76,  $p < .001$ . Also, there was a significant difference between countries, chi-squared (3,  $N = 72$ ) = 12.27,  $p = .007$ . There were no sex differences.

Unfriendliness: Regarding friendliness violations, there was no main effect of country. However, there was a main effect of emotions type,  $F(3, 68) = 15.12$ , partial eta-squared = .18,  $p < .001$ , such that participants felt anger most strongly, followed by sadness, disgust, and fear. Mean differences of .73 or greater are significant at the .05 level. Also, this main effect was qualified by a country by emotion interaction,  $F(7, 64) = 5.41$ , partial eta-squared = .07,  $p = .001$ , such that Americans felt sadness most strongly, followed by anger, disgust, and fear. Mean differences of 1.49 or greater are significant at the .05 level. For Koreans, anger was the emotion

felt most strongly, followed by sadness, fear, and disgust. Mean differences of 1.12 or greater are significant at the .05 level.

In response to the most salient emotion caused by unfriendliness, of the 39 American respondents, 18 chose sadness, 14 chose anger, 7 chose disgust, and 0 chose fear. These frequencies were not significantly different. Of the 32 Korean respondents, 18 participants chose anger, 7 chose sadness, 5 chose disgust, and 3 chose fear. These frequencies were significantly different than what would be expected by chance, chi-squared (3,  $N = 33$ ) = 16.33,  $p = .001$ . Also, there was a significant difference between countries, chi-squared (3,  $N = 72$ ) = 8.23,  $p = .041$ . There were no sex differences.

**Uncharitableness:** Regarding charitableness violations, there was no main effect of country. However, there was a main effect of emotions,  $F(3, 68) = 11.52$ , partial eta-squared = .14,  $p < .001$ , such that participants felt disgust most strongly, followed by sadness, anger, and fear. Mean differences of .83 or greater are significant at the .05 level. The main effect was qualified by a country by emotion interaction,  $F(7, 64) = 6.56$ , partial eta-squared = .09,  $p < .001$ , such that Americans felt disgust most strongly, followed by anger and sadness, and finally fear. Mean differences of 1.71 or greater are significant at the .05 level. However, there were no significant differences among Koreans.

In response to the most salient emotion caused by unfriendliness, of the 38 American respondents, 18 chose sadness, 17 chose disgust, 3 chose anger, and 0 chose fear. These frequencies were significantly different than what would be expected by chance, chi-squared (2,  $N = 38$ ) = 11.11,  $p = .004$ . Of the 32 Korean respondents, 12 participants chose sadness, 9 chose disgust, 8 chose anger, and 4 chose fear. These frequencies were not significantly different. Also, there was a significant difference between countries, chi-squared (3,  $N = 71$ ) = 9.63,  $p = .022$ . There were no sex differences. See Table 1 and 2.

### **Moral Attributions**

In order to corroborate the findings of An and Trafimow (2014), we conducted a two way, repeated measures ANOVA on country (Korea and the US) and duty violation type (perfect and imperfect). There was no main effect of country (Korea and the US). However, there was a main effect of duty,  $F(1, 71) = 7.22$ , partial eta-squared = .09,  $p = .009$ , such that fewer perfect than imperfect duty violations were required to override a positive trait impression. This main effect was qualified by a country by moral duty interaction,  $F(3, 68) = 7.73$ , partial eta-squared = .10,  $p = .007$ , such that for Americans, fewer perfect than imperfect duty violations were required to override a positive trait impression. However, for Koreans, there were no differences between the number of perfect and imperfect duty violations required to override a positive trait impression. See Table 3. These results corroborate those reported in An and Trafimow (2014). There were no sex differences.

### **DISCUSSION**

The goal of the present research was to determine whether people from different cultures feel different emotions while making moral attributions. The present results revealed that Koreans

and Americans felt different levels of the four basic negative emotions (anger, disgust, fear, and sadness) in response to moral violations. Overall, Koreans felt less negative emotion than Americans in response to perfect duty violations, while there were no differences for imperfect duty violations.

In response to perfect duty violations, Koreans reported feeling similar levels of all four emotions, but overall reported feeling a lesser degree of emotion than Americans. Regarding perfect duty violations (dishonesty and disloyalty), American participants reported feeling more anger, disgust, and sadness than fear. On the other hand, regarding dishonesty, Koreans participants did not differentiate amongst four emotions, and regarding disloyalty, reported feeling anger more strongly than the other three emotions. These findings help shed light on why Koreans and Americans reported a similar amount of negative affect in response to perfect duty violations, but made different moral attributions (An & Trafimow, 2014). These results highlight the differences between affect and emotion; while affect is an initial “like or dislike”, emotion is a more complicated, cerebral evaluation of said experience (Weiner, 1985; 1982). Accordingly, it is possible that even if Koreans and Americans initially felt a similar amount of negative affect, Koreans withheld their attributions until they felt enough emotion to make a decision. Americans, on the other hand, immediately made attributions based on negative affect without requiring more information about moral violations. This suggests that Asians use more complicated processes for evaluating their affect and emotions as they require more information to make attributions, whereas Americans implicitly rely on their affect and emotions (An & Trafimow, 2014).

Regarding imperfect duty violations, Koreans and Americans reported a similar amount of negative emotion overall, but the specific emotions they reported feeling were different. When encountering a friendliness violation, Americans tended to respond with anger, disgust, and sadness whereas Koreans overwhelmingly responded with anger. Regarding uncharitableness, Americans again responded with anger, disgust, and sadness. Koreans, however, reported feeling similar amounts of all four emotions. See Table 1. This finding may be due to Koreans feeling different kinds of negative emotions other than those that they were asked to rate (e.g. annoyance, pity etc.). Additionally, some researchers (Spencer-Rodgers, Peng & Wang, 2010; Miyamoto, Uchida & Ellsworth, 2010) have demonstrated that Easterners tend to have mixed emotions in response to situational information compared to Westerners. These researchers, however, focused on the co-occurrence of positive and negative emotions (e.g. happiness and sadness) rather than a mix of specific types of emotions as is in the current study. Accordingly, the present findings suggest that Koreans might have felt more complex emotions related to morality compared to Americans.

Regarding the most strongly felt emotions, Americans chose fear much less often than Koreans. Past research has shown that when people face a threat, they feel fear (Öhman, A., 2005). Koreans may have thus perceived moral violations as more of threat to themselves and their community than did Americans as they tend to be more collectivistic compared to Americans, and hence felt fear a greater proportion of the time than Americans.

Lastly, regarding attributions, Americans made harsher moral attributions about perfect than imperfect duty violations, while Koreans did not differentiate between the two, replicating An



and Trafimow (2014). The results again support the claim that Americans made harsher attributions on perfect than imperfect duty violations, whereas Koreans did not differentiate between them.

### **Implications of the Present Results**

Taken together, the present findings have several implications for cross-cultural attribution theory and research. While the process of moral attribution seems to be different for perfect and imperfect duty violations, Koreans appear to withhold their attributions and seek additional information (either situational or dispositional) for both perfect and imperfect moral violations. The results support decision withholding theory (An & Trafimow, 2014).

Thus, when we study morality, attributions, and/or emotions, we must be cognizant of the cultural meaning of the context. Even if some contexts are generalized as positive or negative, the context might be associated with specific positive or negative emotions depending on cultural context, which can result in differences in attribution processes (e.g., Koreans not making as strong attributions as Americans about perfect duty violations). Also, it is possible that Koreans perceived imperfect duty violations as more of threat to themselves and their community than did Americans, and hence felt fear in addition to the other negative emotions.

### **Limitations and Future Directions**

One limitation of the present research is that we used hypothetical scenarios. This limits the external validity of the findings. However, this was done to allow full control over the experiment, and to exclude confounding or extraneous factors (e.g., physical attractiveness, body language, or facial expressions). While it might be difficult to generate more realistic stimuli devoid of context to test dispositional inferences, it would have increased the ecological validity and generalizability of our findings. Also, a further limitation is that we used only two versions of each violation type. This limits our ability to generalize to violations of perfect and imperfect duties not used in the present set of experiments. Future research should involve additional duty violations that were not used here. Lastly, we only employed four negative emotions. It is possible that Koreans might have felt other kinds of emotions besides the four that were used in the project. Thus, future research should involve additional emotions that were not used here.

In closing, the present research contributes to cross-cultural moral attribution research by demonstrating that moral attribution differences between cultures were caused by the types of emotion people felt in response to moral violations. Cross-cultural psychology is about much more than just showing that a phenomenon that occurs in one culture does not occur in another. 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 current study highlights the importance of differentiating emotion and affect, as well as the importance of differentiating between them. Thus, the findings contribute to the psychology field in general, not only cross-cultural studies.

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## APPENDIX A

### Correlation Matrix for Variables Examined in ANOVAs.

Variables	1	2	3	4
1. Honesty	-	-	-	-
2. Loyalty	0.47**	-	-	-
3. Friendliness	0.20	0.15	-	-
4. Charitability	0.51**	.29*	.43**	-
<i>M</i>	2.46	2.56	2.86	3.07
<i>SD</i>	1.43	1.41	1.53	1.74
<i>N</i>	72	72	72	72

\*  $p < .05$

\*\*  $p < .01$

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