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# Group Morality and Intergroup Relations: Cross-Cultural and Experimental Evidence

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*An observational, cross-cultural study and an experimental study assessed behaviors indicative of a moral code that condones, and even values, hostility toward outgroups. The cross-cultural study, which used data from the Standard Cross-Cultural Sample (Murdock & White, 1969), found that for preindustrial societies, as loyalty to the ingroup increased the tendency to value outgroup violence more than ingroup violence increased, as did the tendencies to engage in more external than internal warfare, and enjoy war. The experimental study found that relative to guilt-prone group members who were instructed to remain objective, guilt-prone group members who were instructed to be empathic with their ingroup were more competitive in an intergroup interaction. The findings from these studies suggest that group morality is associated with intergroup conflict.*

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**Keywords:** group morality; intergroup conflict; loyalty; guilt; empathy

Wars in places like Bosnia, Cambodia and Rwanda have claimed 30 million lives across the world and made refugees of another 45 million since 1990.

—Patrick McGuire (1998, p. 1)

Every day, newspaper headlines report instances of extreme intergroup violence in the United States and throughout the world—examples include inner city gang violence in the United States, the unending Israeli-Palestinian conflict, civil unrest in Ireland, and suicide bombings in the Middle East. The list, unfortunately, could go on. In the 20th century, there were at least 15 full-scale genocides (McGuire, 1998). Although violence between individuals can be extreme, one person alone cannot instigate genocide. Genocide is an intergroup phenomenon and, as such, begs the question, how can groups commit such atrocities?

In this article, we argue that hostile behavior toward outgroups is not only accepted but is often praised, appreciated, and morally sanctioned. We present evidence suggesting that behaviors that violate moral standards in interindividual interactions (e.g., hostility and violence) may be consistent with moral standards in intergroup interactions.

## GROUP MORALITY

Morality can be defined as standards of right and wrong conduct or, alternatively, as rules governing behavior. Although moral codes for interindividual interactions tend to promote fair, cooperative behavior (e.g., Pemberton, Insko, & Schopler, 1996; Thibaut & Walker, 1975), we believe that moral codes for intergroup interactions do not demand benevolent behavior toward outgroups. Instead, we propose that group behavior is governed by the codes of group morality, which requires that group members follow an ingroup-favoring norm (Wildschut, Insko, & Gaertner, 2002), encouraging them to do what is best for their ingroup regardless of how much outgroups may suffer as a consequence.

The concept of a distinctive group morality is not a new idea. In the 1940s, the theologian Reinhold Niebuhr

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argued that accepted standards of group behavior often violate moral standards for individual behavior. According to Niebuhr (1941), "the group is more arrogant, hypocritical, self-centered and more ruthless in the pursuit of its ends than the individual" (p. 222). As a result, Niebuhr argued, "an inevitable moral tension between individual and group morality is therefore created" (p. 222). Niebuhr assumed that the divergence between individual and group morality was the result of selfishness and ruthlessness on behalf of the group—Le Bon (1896) would have agreed. Similar to Niebuhr, Le Bon considered whether groups were moral. In *The Crowd*, Le Bon (1896) concluded that group behavior can be regarded either as moral or immoral depending on what behaviors are used to define morality. Le Bon pointed out that although groups are often impulsive and selfish, they also exhibit qualities such as self-sacrifice and devotion. Therefore, Le Bon concluded, groups may at times exhibit "a very lofty morality" (p. 43).

Following Floyd Allport's (1924) influential critique of Le Bon's concept of a group or crowd mind, the idea of a distinctive group morality was largely lost to social psychology. We thus find it interesting that the idea was present in the writings of theologians (e.g., Niebuhr, 1941) and anthropologists (e.g., Margaret Mead; see Bloom, 1997). Consistent with the notion of group morality, Mead suggested that every human group has separate sets of behaviors for the treatment of ingroup members and outgroup members. According to Mead, "Every human group makes a simple rule: thou shalt not kill members of our gang, but everyone else is fair game" (as cited in Bloom, 1997, p. 73). Mead pointed out that most primitive societies regard tribal members as full-fledged human beings but do not regard citizens of other tribes as human. Mead noted that "most primitive tribes feel that if you run across one of these subhumans from a rival group in the forest, the most appropriate thing to do is bludgeon him to death" (as cited in Bloom, 1997, p. 74). These behavioral standards that Mead described map onto the codes of group morality.

More recently, the idea of group morality has been advanced by Ridley (1996) in his game-theory perspective on virtue and morality. Here is a quote that expresses the basic idea rather well: "When Joshua killed twelve thousand heathen in a day and gave thanks to the Lord afterwards by carving the ten commandments in stone, including the phrase 'Thou shalt not kill,' he was not being hypocritical" (Ridley, 1996, p. 192). Ridley's statement implies that individuals who are most likely to engage in moral behavior also may be most likely to engage in violence on behalf of their ingroup. Of interest, this same idea has been echoed by terrorism researchers (Sageman, 2004; Victoroff, 2005). For example, Sageman's research on terrorism

led him to conclude that "those least likely to do harm individually are sometimes the most able to do so collectively" (as cited in Dingfelder, 2004, p. 21). Sageman (2004) based this conclusion, in part, on the finding that members of terrorist groups tend to be "middle-class, educated young men from caring and religious families, who grew up with strong positive values of religion, spirituality, and concern for their communities" (p. 96). Sageman's finding that terrorists do not tend to be immoral individuals but do tend to show strong concern for their communities is consistent with our proposal that group morality accepts and approves of hostile behavior toward outgroups.

### *Experimental Evidence for Group Morality*

In addition to the observational evidence cited above, there are several prior experiments that provide evidence for group morality in intergroup interactions. The first empirical evidence comes from Wildschut et al. (2002). Wildschut et al. (Experiment 3) had participants play one trial of a prisoner's dilemma game (PDG) in groups of five, ostensibly against an opposing group of five participants. Participants were told that each group's decision (cooperation or competition) would be determined by majority vote. Relevant to the notion of an ingroup-favoring norm, which is the assumed basis for group morality, Wildschut et al. manipulated whether participants anticipated discussing their individual PDG votes with the other members of their own group (public condition) after each group had made a decision. The researchers hypothesized that participants who expected their votes to be public, relative to those who did not (private condition), would experience greater concern with conforming to the standards of group morality because only in this condition would they face public evaluation by ingroup members (Deutsch & Gerard, 1955; Insko, Smith, Alicke, Wade, & Taylor, 1985). Wildschut et al. (2002) assumed that participants' concern for adhering to the standards of group morality would result in increased intergroup competition. As expected, intergroup competition was significantly greater in the public than in the private condition, and participants in the public condition expressed more concern with maximizing their group's outcomes than did participants in the private condition.

Another way of investigating group morality is via guilt. Wildschut and Insko (2006) tested for evidence indicative of group morality by examining guilt because of guilt's postulated role as a moral emotion (Ausubel, 1955; Smith, Webster, Parrott, & Eyre, 2002; Tangney, 2003). Tangney (2003) defines a moral emotion as one that "provides the motivational force—the power and energy—to do good and to avoid doing bad" (p. 386).

Tangney (e.g., 2003) and others (e.g., Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Ferguson, Stegge, Miller, & Olsen, 1999; Ketelaar & Au, 2003) have found that guilt motivates positive, reparative, moral behavior. Bandura et al. (1996), for example, found that school children who were "less troubled by anticipatory feelings of guilt" were more likely to resort to "vengeful ruminations," "irascible reactions," and "delinquent behavior" (p. 371).

Wildschut and Insko (2006) argued that guilt's role as a moral emotion would help predict adherence to group morality. Consistent with their argument, they found that high-guilt-prone group members in the public condition, relative to high-guilt-prone group members in the private condition, reported more concern with maximizing the relative outcomes of their ingroup and made more competitive PDG choices. Wildschut and Insko's (2006) findings are especially striking in light of research by Ketelaar and Au (2003), which found that guilt leads individuals to cooperate in the prisoner's dilemma game. Wildschut and Insko (2006) reconciled these seemingly incongruent findings with the theory of two moralities, a theory that states that interindividual and intergroup interactions are governed by different moral codes. According to Wildschut and Insko (2006), "Paradoxically, then, those who adhere closest to the tenets of individual morality may be most likely to violate these tenets as the demands of group morality become more salient" (p. 381). The role of guilt proneness in intergroup conflict also was explored by Insko, Kirchner, Pinter, Efaw, and Wildschut (2005) and Pinter et al. (2006). Consistent with Wildschut and Insko's (2006) findings, Insko et al.'s (2005) and Pinter et al.'s (2006) results both suggest that group morality and guilt proneness encourage intergroup competition.

#### INTERDEPENDENCE THEORY AND NONCORRESPONDENCE

It is important to note that in all of the prior studies on group morality (Insko et al., 2005; Pinter et al., 2006; Wildschut et al., 2002; Wildschut & Insko, 2006) the intergroup interactions took place in the context of noncorrespondent mixed-motive situations. According to interdependence theory (Kelley & Thibaut, 1978; Thibaut & Kelley, 1959), correspondence refers to the extent to which each party's interests are the same (i.e., correspondent) or different (i.e., noncorrespondent). Correspondence predicts how smooth or conflictual an interaction will be. For matrix interactions in which outcomes are symmetric, correspondence is indexed by the simple correlation between the players' outcomes across the cells. If the correlation is positive, or correspondent,

as one player's outcomes increase, the other player's outcomes also increase. If the correlation is negative, or noncorrespondent, as one player's outcomes increase, the other player's outcomes decrease. Situations characterized by complete noncorrespondence are generally referred to as zero-sum. The prisoner's dilemma game is a classic example of a moderately noncorrespondent situation (Kelley & Thibaut, 1978).

We believe that group morality applies primarily to situations characterized by noncorrespondence because it is only in noncorrespondent situations that helping one's ingroup requires hurting an outgroup. However, noncorrespondence does not need to be real; it only needs to be perceived. Interdependence theory assumes that individuals and groups often transform the given matrix (e.g., the matrix that is supplied in an experimental situation) into an effective matrix (e.g., the assumed matrix that plays an actual role in determining behavior). By way of illustration, one individual or group may view the interdependent situation not in terms of objective outcomes but in terms of relative superiority, or in terms of winning and losing, and thus go from a given matrix in which outcomes are correspondent to an effective matrix in which outcomes are noncorrespondent. Such a transformation would imply that there may be perceived group conflict even when outcomes are objectively correspondent.

Unlike interindividual interactions, intergroup interactions tend to be characterized by greed and fear (Hoyle, Pinkley, & Insko, 1989; Insko, Schopler, Hoyle, Dardis, & Graetz, 1990). As a consequence, intergroup interactions tend to be more competitive and more aggressive than interindividual interactions (Meier & Hinsz, 2004; Wildschut, Pinter, Vevea, Insko, & Schopler, 2003). Furthermore, because both laboratory (Meier & Hinsz, 2004; Wildschut et al., 2003) and diary studies (Pemberton et al., 1996) have found that intergroup interactions tend to be more contentious than interindividual interactions, it is likely that relatively more intergroup interactions than interindividual interactions are characterized by perceived or actual noncorrespondence. This difference may be one of the factors contributing to a more combative moral code for intergroup relations than for interindividual relations.

#### RESEARCH OVERVIEW

The goal of the present research was to test whether group morality is associated with intergroup conflict. Study 1 used extant cross-cultural data to test whether ingroup loyalty moderates the relationship between ingroup and outgroup violence. Specifically, we predicted a Violence  $\times$  Loyalty interaction, such that

ingroup loyalty would be associated with relatively more outgroup than ingroup violence. Such an interaction would rule out the possibility that there is a general tendency for ingroup loyalty to be associated with violence and instead suggests that ingroup loyalty promotes relative differences between ingroup and outgroup violence. Study 2 was a laboratory experiment that used the prisoner's dilemma game to determine how ingroup empathy and guilt-proneness affect intergroup competition. Specifically, we predicted an Empathy  $\times$  Guilt interaction, such that guilt-proneness would be associated with increased competition among group members who were instructed to empathize with their ingroup. Although intergroup violence and intergroup competition are distinct constructs, they are both expressions of intergroup conflict and, as such, may be viewed through the lens of group morality.

## STUDY 1

### *Purpose of Study 1*

The goal of Study 1 was to provide cross-cultural evidence for the prediction that ingroup loyalty is associated with a tendency to value and engage in more outgroup violence than ingroup violence. This assumption is based on the group-morality idea that group members who care most about their ingroup will show the most hostility toward outgroups in situations characterized by actual or perceived noncorrespondence.

Similar predictions also could be derived from realistic-group-conflict theory (Campbell, 1965; LeVine & Campbell, 1972; Sherif & Sherif, 1953) and social identity theory (Tajfel & Turner, 1979). Whereas social identity theory implies that ingroup identification leads to outgroup hostility (Brown, 1995; Turner & Oakes, 1989), realistic-group-conflict theory postulates the opposite causal pathway when the conflict is over real issues (e.g., territory or political power). Studies evaluating the causal ordering between loyalty and violence have revealed equivocal findings (cf. Brewer, 1999; Duckitt & Mphuthing, 1998; Struch & Schwartz, 1989). Although the question of "which comes first" is an interesting one, the purpose of our investigation was not to determine the causal relationship between ingroup loyalty and outgroup violence. Instead, our goal was to demonstrate that ingroup loyalty moderates the relationship between ingroup and outgroup violence. Although not tested by the current investigation, we find it plausible that there is a feedback loop between ingroup loyalty and outgroup hostility such that outgroup hostility leads to ingroup loyalty and ingroup loyalty, in turn, leads to outgroup hostility.

## METHOD

### *Sample*

We tested whether ingroup loyalty moderates the relationship between ingroup and outgroup violence with data from the Standard Cross-Cultural Sample (SCCS; Murdock & White, 1969). The SCCS comes from the Ethnographic Atlas (Murdock, 1967), which was assembled by ethnographers who collected primary descriptions of 1,167 cultures throughout the world. The Ethnographic Atlas was constructed to provide a database of a representative sample of the world's cultures with respect to languages, geographic region, climate, and government. To reduce the likelihood of contamination from cross-cultural contact, the SCCS contains only one society from each of the 186 provinces in the Ethnographic Atlas and is primarily a sample of preindustrial societies. For most societies, the time of assessment was between 1850 and 1950. Subsequent researchers have numerically coded the ethnographic data (e.g., Lang, 1995; Ross, 1983; Wheeler, 1974). Societies in the database include groups as diverse as the Japanese, Irish, Turks, Romans, Aztecs, Yanomamo, Kung Bushmen, Nkundo Mongo, Russians, Egyptians, Hebrews, Babylonians, Chinese, Vietnamese, Copper Eskimo, Pawnee, Western Samoans, and Rwala Bedouin. Both the Ethnographic Atlas and the SCCS have been used repeatedly to test cross-cultural hypotheses (e.g., Cashdan, 2001; C. R. Ember & Ember, 1994; M. Ember, 1975).

The SCCS database contains information from 186 societies; however, for many variables, there is a substantial amount of missing data. In our analyses, we tried to use as much of the available data as possible. As a result, our tests of simple effects often have more degrees of freedom than our paired tests. Although one could argue that our paired and simple effect analyses rely on different samples, the results obtained from the reduced samples are not substantively different from those obtained using all the available data.

### *Variables<sup>1</sup>*

*Attitudes toward ingroup violence and outgroup violence.* One item assessed societies' attitude toward ingroup violence (i.e., "the acceptability of violence directed at members of the local community") and a second item assessed societies' attitude toward outgroup violence (i.e., "the acceptability of violence toward people in other societies"). These items were coded by Ross (1983). After we reversed the items, they had the following scale: 4 (*valued*), 3 (*accepted*), 2 (*tolerated*), and 1 (*disapproved*).

*Attitudes toward intraethnic violence and interethnic violence.* One item assessed societies' attitude toward intraethnic violence (i.e., "attitude toward physical violence against members of same ethnic group, not restricted to the local community") and a second item assessed societies' attitude toward interethnic violence (i.e., "attitude toward physical violence against members of other ethnic groups"). These items were coded by Lang (1995). Lang defined an ethnic group as a "group of persons perceiving themselves as [a] unit and [who] set themselves apart from other such units. The unity is based on real or supposed common origin, common fate, common language or religion, [and] adherence to common norms and values" (p. 50). These two variables had the following scale: 3 (*physical violence is appreciated—the use of physical violence is highly valued and the use of it leads to an increase of the actor's prestige*), 2 (*physical violence is tolerated or accepted—neither positive nor negative sanctions follow the use of physical violence*), and 1 (*physical violence is rejected—the use of physical violence is rejected and possibly leads to negative sanctions*).

*Frequency of internal and external warfare.* The frequencies of internal warfare ("warfare between communities of the same society") and external warfare ("wars with other societies") were coded by Ross (1983). After we reversed these items, they had the following scale: 4 (*frequent, occurring at least yearly*), 3 (*common, at least every 5 years*), 2 (*occasional, at least every generation*), and 1 (*rare or never*).

*Frequency of intraethnic and interethnic violence.* Frequencies of intraethnic and interethnic violence were coded by Lang (1995). Frequency of intraethnic violence refers to the frequency of violence within the ethnic group. Frequency of interethnic violence denotes how frequently the ethnic group attacked other ethnic groups. These items had the following scale: 4 (*permanent*), 3 (*often*), 2 (*occasional*), and 1 (*rare or never*).

*Value of war.* Wheeler (1974) coded societies for the value of war as "violence or war against nonmembers of the group." After we reversed this item, it had the following scale (3 = *war is enjoyed and considered to have high value*, 2 = *war is considered a necessary evil*, 1 = *war is consistently avoided, denounced, and not engaged in*).

*Ingroup loyalty.* Ross (1983) coded societies for the degree of ingroup loyalty, defined as "a we feeling directed towards the local community" (p. 179). After we reversed this item, it had the following scale: 4 (*especially high*), 3 (*high*), 2 (*moderate*), and 1 (*low*).

*Intraethnic loyalty.* The intraethnic loyalty assessment ("loyalty within ethnic groups") was coded by Lang (1995). Lang defined loyalty as "consciousness of belonging together" (p. 50). Intraethnic loyalty had the

following scale: 3 (*high*), 2 (*middle*), and 1 (*low*). Lang (1995, p. 50) used six possible indicators to assess intraethnic loyalty: (a) positive group evaluation, (b) existence of an emblem of the ethnic group, (c) norms for the protection of the ethnic group, (d) trust in members of the ethnic group, (e) norms and values supporting group solidarity, and (f) cooperation within [the] ethnic group at rituals or community labor.

## RESULTS

For all reported analyses, except where noted, we conducted repeated-measures ANOVAs with ingroup and outgroup violence treated as within-cultures factors and ingroup loyalty treated as a continuous regressor. In the first step, we entered just ingroup and outgroup violence, and in the second step, we entered the assessment of ingroup loyalty and the Violence  $\times$  Loyalty interaction.

### *Attitudes Toward Ingroup and Outgroup Violence*

We found a significant main effect of violence,  $F(1, 62) = 236.87, p < .001$ . Societies were more likely to value outgroup violence ( $M = 3.37, SD = .95$ ) than ingroup violence ( $M = 1.37, SD = .63$ ). When ingroup loyalty and Violence  $\times$  Loyalty were entered into the model, we found the predicted Violence  $\times$  Loyalty interaction,  $F(1, 59) = 4.34, p < .05$ . As shown in Figure 1, as loyalty to the local community increased, the relatively greater preference for outgroup violence than ingroup violence also increased. We explored this interaction with tests of simple slopes. Both simple slopes were nonsignificant: for the effect of ingroup loyalty on attitudes toward ingroup violence,  $B = -.04, SE = .08, F(1, 79) = .28, p < .60$ , and for the effect of ingroup loyalty on attitudes toward outgroup violence,  $B = .20, SE = .15, F(1, 59) = 1.98, p < .17$ .

### *Attitudes Toward Intraethnic and Interethnic Violence*

We found a significant main effect of violence,  $F(1, 34) = 10.24, p < .004$ . Societies were more likely to appreciate interethnic violence ( $M = 2.33, SD = .80$ ) than intraethnic violence ( $M = 1.66, SD = .75$ ). When intraethnic loyalty and Violence  $\times$  Loyalty were entered into the model, we found the predicted Violence  $\times$  Loyalty interaction,  $F(1, 30) = 9.41, p < .005$ . As shown in Figure 2, as intraethnic loyalty increased, the relatively greater preference for interethnic violence than intraethnic violence also increased. The simple effect of intraethnic loyalty on attitudes toward interethnic violence was nonsignificant,  $B = .21, SE = .15, F(1, 32) = 2.14, p < .16$ . The simple effect of intraethnic loyalty on attitudes toward intraethnic violence was significant,  $B = -.23, SE = .11, F(1, 55) = 4.81, p < .04$ .

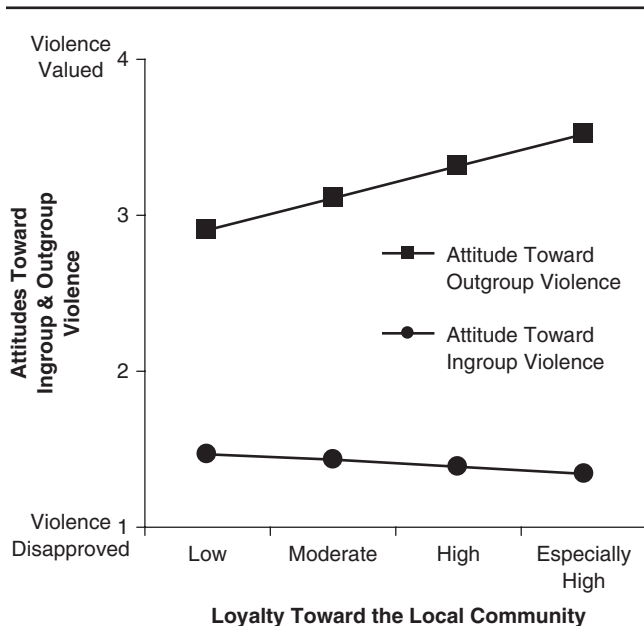


Figure 1 Attitudes toward ingroup and outgroup violence regressed on ingroup loyalty.

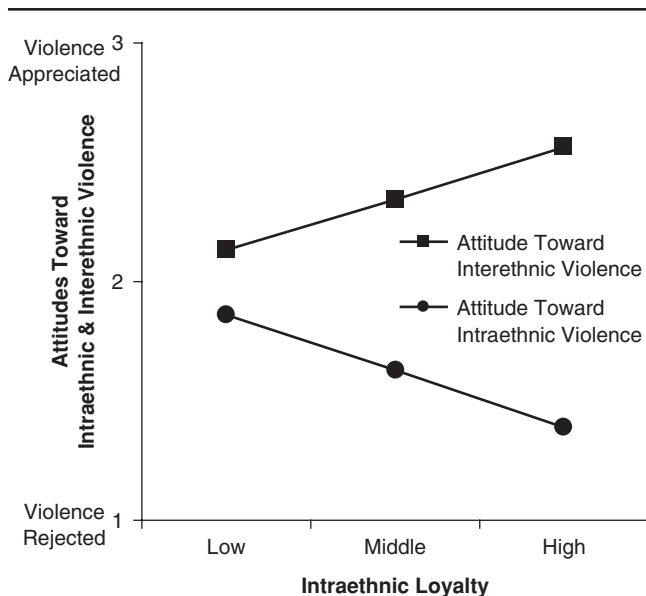


Figure 2 Attitudes toward intraethnic and interethnic violence regressed on intraethnic loyalty.

#### Frequency of Internal and External Warfare

We found a significant main effect of warfare,  $F(1, 81) = 7.18, p < .01$ . Societies were more likely to engage in external warfare ( $M = 2.99, SD = 1.26$ ) than internal warfare ( $M = 2.54, SD = 1.31$ ). When ingroup loyalty and Warfare  $\times$  Loyalty were entered into the model, we found

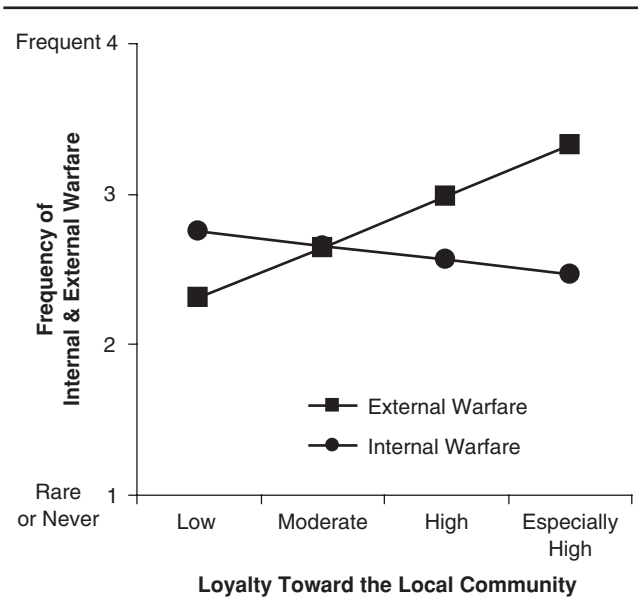


Figure 3 Frequency of internal and external warfare regressed on ingroup loyalty.

the predicted Warfare  $\times$  Loyalty interaction,  $F(1, 76) = 4.62, p < .04$ . As shown in Figure 3, as loyalty to the local community increased, the relatively greater frequency of external than internal warfare also increased. The simple effect of ingroup loyalty on internal warfare was non-significant,  $B = -.09, SE = .17, F(1, 79) = .32, p < .57$ . The simple effect of ingroup loyalty on external warfare was significant,  $B = .34, SE = .16, F(1, 76) = 4.75, p < .04$ .

#### Frequency of Intraethnic and Interethnic Violence

Unlike the previous analyses, we did not find a significant main effect for the frequency of intraethnic-interethnic violence,  $F(1, 79) = .18, p < .68$ . However, consistent with predictions, when intraethnic loyalty and Violence  $\times$  Loyalty were entered into the model, we found a significant Violence  $\times$  Loyalty interaction,  $F(1, 66) = 9.91, p < .003$ . As shown in Figure 4, as intraethnic loyalty increased, the relatively greater frequency of interethnic than intraethnic violence also increased. The simple effect of intraethnic loyalty on intraethnic violence was marginal,  $B = -.24, SE = .13, F(1, 78) = 3.77, p < .06$ . The simple effect of intraethnic loyalty on interethnic violence was significant,  $B = .30, SE = .15, F(1, 70) = 4.13, p < .05$ .

#### Value of Warfare

A linear regression analysis revealed that loyalty to the local community significantly predicted the value of war (violence or war against nonmembers of the group),  $B = .22, SE = .09, F(1, 67) = 5.51, p < .03, R^2 = .08$ .



Figure 4 Frequency of intraethnic and interethnic violence regressed on intraethnic loyalty.

As shown in Table 1, societies with greater ingroup loyalty were more likely to value and enjoy warfare. Eight percent of the variance in the value of war was attributable to ingroup loyalty.

## DISCUSSION

The results were consistent with the idea that group morality encourages relatively more outgroup violence than ingroup violence. In support of group morality, we found that as loyalty to the local community increased, the tendency to value outgroup violence more than ingroup violence increased, the tendency to engage in more external than internal warfare increased, and the tendency to value war increased. Furthermore, we found that as intraethnic loyalty increased, the tendency to appreciate interethnic violence more than intraethnic violence increased, and the tendency to engage in more interethnic than intraethnic violence increased. All of the simple slopes were in the predicted directions, although many of them did not reach statistical significance. Because of the nature of the sample and the large amount of missing data, it is possible that we did not have enough statistical power to detect the significance of many of the simple slopes. Regardless, our predictions were centered on the Violence  $\times$  Loyalty interactions, not the simple slopes. Of importance, all of the Violence  $\times$  Loyalty interactions were statistically significant. These interactions indicate that there is not

TABLE 1: Frequency of Societies That Denounced Versus Enjoyed Violence Against Outgroup Members as a Function of Ingroup Loyalty

Ingroup Loyalty	Value of War		
	Denounced and Avoided	Considered a Necessary Evil	Valued and Enjoyed
Low	1 (1%)	3 (4%)	2 (3%)
Moderate	6 (9%)	3 (4%)	4 (6%)
High	2 (3%)	5 (7%)	17 (25%)
Especially high	2 (3%)	8 (12%)	16 (23%)

NOTE:  $N = 69$ . Percentages of the sample are given in parentheses.

just a general tendency toward more loyalty-associated violence. Instead, the interactions suggest that ingroup loyalty moderates the relationship between ingroup and outgroup violence. In sum, the results from Study 1 are consistent with group morality in that they show that concern for the ingroup is associated with behaving more violently toward outgroup members than toward ingroup members.

## STUDY 2

Whereas the goal of Study 1 was to provide cross-cultural evidence for group morality, the goal of Study 2 was to provide convergent experimental evidence. In Study 2, we investigated group morality by examining how guilt proneness and ingroup empathy affect intergroup behavior in the prisoner's dilemma game.

### *Intergroup Conflict and the Prisoner's Dilemma*

The PDG is a commonly used method for modeling intergroup conflict in a laboratory setting (e.g., Wildschut et al., 2003). In the PDG (e.g., Figure 5), groups interact by choosing to either cooperate or compete. Axelrod (1984) convincingly argued that the prisoner's dilemma could be used to model trench warfare in World War I. Axelrod pointed out that soldiers on the Western Front were faced with the decision to either "shoot to kill" (compete) or "deliberately shoot to avoid doing damage" (cooperate). According to Axelrod (1984), "Two small units facing each other across one hundred to four hundred yards of no-man's-land were players in one of these potentially deadly Prisoner's Dilemmas" (p.75).

On the surface, intergroup violence and intergroup competition may appear unrelated, yet they are both manifestations of intergroup conflict. Both intergroup violence and intergroup competition are noncorrespondent domains and thus require group members to decide whether to hurt the outgroup to help the

		Group A			
		W	X	Y	Z
Group B	W	255	270	285	300
	X	220	235	250	265
	Y	185	200	215	230
	Z	150	165	180	195
		300	265	230	195

Figure 5 Four-choice prisoner's dilemma game matrix.

ingroup. In support of the link between intergroup competition and intergroup violence, Meier and Hinsz (2004) successfully replicated the interindividual-intergroup discontinuity effect (Wildschut et al., 2003) in the domain of intergroup aggression. Previous to Meier and Hinsz (2004), the discontinuity effect had only been used to describe differences in competition between groups and individuals. Meier and Hinsz's extension of the discontinuity effect to the domain of aggression suggests that intergroup competition and violence may be governed by similar processes. There are, of course, obvious differences between competition and violence; however, we believe that both domains can be subsumed by the larger construct, intergroup conflict, and can potentially be explained by group morality.

#### Purpose of Study 2

The purpose of Study 2 was to experimentally investigate how group morality relates to intergroup conflict. To this end, we used an empathy manipulation (cf. Batson et al., 2003) to examine the effects of ingroup empathy and guilt proneness on behavior in the prisoner's dilemma game. The purpose of the empathy manipulation was to make ingroup-favoring norms salient. In previous research on group morality (Wildschut & Insko, 2006), a public responding manipulation was used to make ingroup-favoring norms salient. Our manipulation of ingroup empathy is conceptually similar to Wildschut and Insko's (2006) public responding manipulation in that both manipulations induce a concern about the reactions of ingroup members.

We chose to use an empathy manipulation because research suggests that empathy can, in certain circumstances, motivate moral behavior (e.g., Batson et al., 2003; Kohlberg, 1976; Miller & Eisenberg, 1988; Stephan & Finlay, 1999). Empathy is positively correlated with the development of moral reasoning (Kohlberg, 1976) and negatively correlated with aggression (Miller & Eisenberg, 1988) and prejudice (Stephan & Finlay, 1999). Furthermore, Batson and colleagues (Batson & Moran, 1999) have found that empathy can cause individuals to cooperate in the prisoner's dilemma, even in the face of defection (Batson & Ahmad, 2001). However, Batson's studies did not investigate how empathy affects intergroup relations. If group morality, in fact, causes intergroup competition, then ingroup empathy should lead high-guilt group members—group members who are likely to behave consistently with moral norms—to behave competitively in noncorrespondent intergroup interactions.

#### Study 2 Overview and Predictions

The four-choice version of the PDG matrix shown in Figure 5 was used to provide a context for the intergroup interaction. Before participants interacted, they were randomly assigned to one of two conditions (ingroup empathy vs. objective perspective). We predicted that guilt-prone participants in the ingroup-empathy condition would be more competitive than guilt-prone participants in the objective-perspective condition. As in past research on group morality (e.g., Insko et al., 2005; Wildschut & Insko, 2006), we hypothesized relatively greater differences among high-guilt-prone participants than among low-guilt-prone participants because high-guilt-prone participants should be more concerned with behaving in line with moral norms.

Finally, in addition to assessing PDG choices, Study 2 also assessed group members' reasons for their choices. Individuals adhering to the standards of group morality should make choices motivated by the intent to maximize either their group's absolute outcomes (max own), relative outcomes (max rel), or both. In addition, adherence to group morality should be negatively associated with concern for maximizing joint outcomes of the ingroup and outgroup (max joint) and minimizing the difference between the ingroup and outgroup (min dif). We suspected that these concerns would mediate competitiveness in the PDG.

Note that our predictions regarding ingroup empathy and guilt are consistent with our Study 1 predictions regarding ingroup loyalty. In both cases, we assumed that concern for the ingroup would be associated with relatively more negative behavior directed at the outgroup.

## METHOD

### Participants

Sixty-six students (18 men, 48 women) enrolled in introductory psychology classes participated in the experiment for partial course credit.

### Independent Variables

The experiment included three independent variables: empathy, guilt proneness, and gender. Empathy was a manipulated categorical factor with two levels: ingroup empathy and objective perspective. Guilt proneness was a continuous regressor measured prior to the introduction of the experimental procedure with the Test of Self-Conscious Affect (TOSCA; Tangney, Wagner, & Gramzow, 1989). The gender factor involved a comparison of all male sessions with all female sessions.

The TOSCA is a scenario-based measure in which individuals are asked to imagine a situation (e.g., "while out with a group of friends, you make fun of a friend who's not there") and then rate how likely it is that they would react in certain ways (e.g., "you would apologize and talk about that person's good points"). There are 15 items in the guilt subscale ( $\alpha = .66$ ). TOSCA guilt scores were standardized to z-scores before conducting any analyses.

### Procedure

The experiment was conducted in a suite containing six rooms—three on each side, separated by an open area. Participants arrived at the laboratory in groups of six. On arrival, they were asked to sit at a table in the center of the suite to complete a consent form and the TOSCA. Next, participants were randomly assigned to groups of three using a "Klee-Kandinsky" minimal group procedure (Tajfel, Billig, Bundy, & Flament, 1971).<sup>2</sup> Participants were ostensibly assigned to groups based on their artistic preferences. Participants assigned randomly to the Klee group moved to separate, individual rooms on one side of the suite and participants assigned to the Kandinsky group moved to separate rooms on the other side of the suite.

After participants were seated in their respective rooms, they were trained on the four-choice PDG matrix shown in Figure 5. Participants received the following instructions regarding the matrix:

In this matrix, each group has four choices, W, X, Y, and Z. The numbers in the diagram represent the payoffs in pennies for both groups for each of the possible combinations of choices that could occur. There will be just one group decision, which will be determined by

how the majority of your group votes. If a tie occurs, you will be asked to vote again.

Following the PDG training, the empathy manipulation was implemented. Participants received an envelope with instructions regarding a thought exercise. The thought exercise was based on instructions used by Batson and colleagues (2003; see also Batson & Moran, 1999). All participants first read, "You have been randomly selected to complete a thought exercise. The other participants in today's session will complete additional measures of personality instead of this exercise." After this statement, participants in the ingroup-empathy condition read the following instructions:

In this exercise we would like for you to *imagine how the other members of your group feel*. That is, imagine how the other members of your group are likely to feel while considering their votes. Imagine also how each of the other members of your group will likely feel when they learn each group's decision. *Take about one minute* for this imagination exercise, getting as clear a sense as possible of how the members of your group likely feel. Then, at the end of the minute, *write down what you imagined*. We have found that carefully following this procedure can ensure understanding of the upcoming interaction.

The objective-perspective thought exercise paralleled the ingroup-empathy exercise and also was modeled after instructions used by Batson and colleagues (Batson & Moran, 1999). Participants in the objective-perspective condition read the following instructions:

In this exercise we would like for you to think about the upcoming interaction. While thinking about the upcoming interaction, try to *take an objective perspective*. That is, try not to get caught up in how your group members feel; just remain objective and detached. *Take about one minute* for this thought exercise, getting as clear a sense as possible of the upcoming interaction. Then, at the end of the minute, *write down what you thought about*. We have found that carefully following this procedure can ensure understanding of the upcoming interaction.

Participants were given approximately 10 min to complete the thought exercise, and following its completion, the interaction in the prisoner's dilemma game took place. After being reminded that there would be one interaction involving the payoff matrix, participants were asked to circle their vote. Participants were reminded that the group's decision would be based on majority vote and that if a tie occurred, they would be asked to revote. After the votes were collected, participants completed open- and closed-ended reasons assessments for their PDG choice. Participants were then debriefed and dismissed.

**TABLE 2: Intercorrelations Between Reasons for PDG Choices**

	<i>Max Own</i>	<i>Max Rel</i>	<i>Max Joint</i>	<i>Min Dif</i>	<i>Distrust</i>
Max Own	—				
Max Rel	.45*	—			
Max Joint	-.49*	-.48*	—		
Min Dif	-.56*	-.34*	.62*	—	
Distrust	.40*	.24*	-.22	-.25	—

NOTE:  $N = 66$ . PDG = prisoner's dilemma game; Max Own = concern for maximizing own outcomes; Max Rel = concern for maximizing relative outcomes; Max Joint = concern for maximizing joint outcomes; Min Dif = concern for minimizing the differences between the two groups.

$p < .05$ .

### Dependent Variables

**PDG choice.** The main dependent variable was participants' vote in the four-choice PDG matrix. The choices were coded as follows:  $W = 1$ ,  $X = 2$ ,  $Y = 3$ , and  $Z = 4$ . In this coding scheme, higher values represent competition and lower values represent cooperation.

**Reasons for PDG choice.** Reasons for the PDG choice were assessed first with an open-ended question and second with closed-ended ratings. The open-ended question was as follows: "If you chose 'W' ('X', 'Y', 'Z', respectively), what was your reason (or reasons) for doing so?" Two independent judges coded these responses for the presence of five possible reasons: (a) concern for maximizing own outcomes, max own ( $\kappa = .67$ ); (b) concern for maximizing relative outcomes, max rel ( $\kappa = .79$ ); (c) concern for maximizing joint outcomes, max joint ( $\kappa = .62$ ); (d) concern for minimizing the differences between the two groups, min dif ( $\kappa = .77$ ); and (e) distrust ( $\kappa = .28$ ).

After responding to the open-ended question, participants completed closed-ended ratings of the five reasons. Ratings were made on 7-point scales (1 = *not at all*, 7 = *very much*). Two items assessed each reason: (a) max own (e.g., "I wanted my group to earn as much as possible"), (b) max rel (e.g., "I wanted my group to earn more than the other group"), (c) max joint (e.g., "I wanted both groups to earn as much as possible together"), (d) min dif (e.g., "I wanted both groups to earn an equal amount"), (e) and distrust (e.g., "I wanted to defend my group against the actions of the other group").

Because separate analyses of the open- and closed-ended assessments yielded similar results and because the two types of assessments were moderately correlated,  $z$ -transformed composites were formed for each of the five reasons. Composites were created by first standardizing and then averaging open- and closed-ended assessments of the same reason. Reliability coefficients for these composites were .81 for max own, .73

for max rel, .82 for max joint, .82 for min dif, and .39 for distrust. A correlation matrix of these reasons is given in Table 2.

**Manipulation checks.** Two independent raters coded the content of the writing exercise for (a) whether the participant thought about their group or group members (e.g., "I wonder if my group members will try for Z as well";  $\kappa = .45$ ) and (b) whether the participant discussed the feelings of their group members (e.g., "My group members are probably feeling anxious";  $\kappa = .70$ ). The judges' ratings were averaged to form an index of thoughts and an index of feelings. Each index ranged from 0 (*did not mention thoughts or feelings*) to 1 (*mentioned thoughts or feelings*).

### RESULTS

Because there were no significant gender main effects or interactions, gender was collapsed for all reported analyses.

#### Manipulation Checks

As expected, an analysis of variance with the empathy manipulation entered as a categorical factor and guilt proneness entered as a continuous regressor revealed a significant main effect of empathy on both thoughts,  $F(1, 62) = 50.05$ ,  $p < .001$ , and feelings,  $F(1, 62) = 76.07$ ,  $p < .001$ . Participants in the ingroup-empathy condition thought about their ingroup more ( $M = 0.97$ ,  $SD = 0.13$ ) than did participants in the objective-perspective condition ( $M = 0.44$ ,  $SD = 0.39$ ), and they discussed the feelings of their ingroup more ( $M = 0.68$ ,  $SD = 0.40$ ) than did participants in the objective-perspective condition ( $M = 0.06$ ,  $SD = 0.20$ ). Unexpectedly, there was also a significant effect of guilt on feelings,  $F(1, 62) = 5.78$ ,  $p < .02$ , indicating that participants high in guilt discussed the feelings of their group members more than did participants low in guilt. Of importance, however, guilt did not significantly interact with empathy,  $F(1, 62) = .54$ ,  $p < .47$ .

#### Intergroup Competition

To test whether guilt proneness and empathy affected intergroup competition, we conducted an ANOVA with the empathy manipulation entered as a categorical factor and guilt proneness entered as a continuous regressor. Critical to our hypotheses, the Empathy  $\times$  Guilt interaction was significant,  $F(1, 62) = 5.69$ ,  $p < .03$  (see Figure 6). Neither main effect was significant ( $F_s < 1.07$ ). Tests of simple slopes revealed that for participants in the ingroup-empathy condition, increased guilt proneness was associated with increased

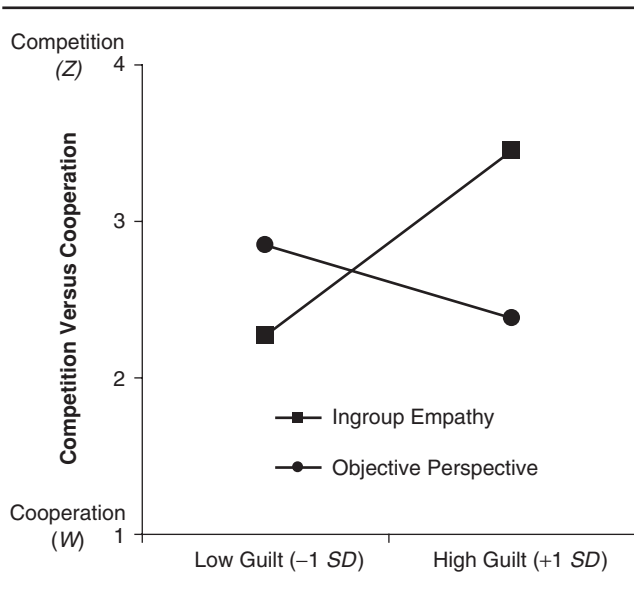


Figure 6 Competition regressed on empathy and guilt proneness.

competition,  $B = .59$ ,  $SE = .27$ ,  $F(1, 28) = 4.93$ ,  $p < .04$ . The reverse association of guilt proneness with competition in the objective-perspective condition was not significant,  $B = -.23$ ,  $SE = .22$ ,  $F(1, 34) = 1.17$ ,  $p < .29$ . Consistent with predictions, high-guilt participants (+1  $SD$  from the mean) in the ingroup-empathy condition were significantly more competitive than were high-guilt participants in the objective-perspective condition,  $t(62) = 2.17$ ,  $p < .04$ . There were no significant differences between conditions for participants with average guilt scores,  $t(62) = .74$ ,  $p < .46$ , or low-guilt scores (-1  $SD$  from the mean),  $t(62) = -1.23$ ,  $p < .23$ .

#### Reasons for PDG Choice

We tested whether guilt and empathy affected participants' reasons for their PDG choice with a series of ANOVAs. For these tests, the empathy manipulation was entered as a categorical factor and guilt proneness was entered as a continuous regressor. The Empathy  $\times$  Guilt interaction predicted max own,  $F(1, 62) = 6.20$ ,  $p < .02$ , max rel,  $F(1, 62) = 8.96$ ,  $p < .004$ , max joint,  $F(1, 62) = 5.25$ ,  $p < .03$ , and min dif,  $F(1, 96) = 5.82$ ,  $p < .02$ , but not distrust  $F(1, 62) = 1.24$ ,  $p < .27$ . No other effects were significant. Compared to high-guilt participants in the objective-perspective condition, high-guilt participants in the ingroup-empathy condition reported increased concern for max own and max rel and decreased concern for max joint and min dif.

#### Mediation Analyses

The potential mediation of the Empathy  $\times$  Guilt interaction on competition by max own, max rel, max

joint, and min dif was assessed using MacKinnon, Lockwood, Hoffman, West, and Sheets's (2002) mediation procedure. Mediation is established when (a) the independent variable significantly influences the mediating variable, (b) the influence of the proposed mediator is significant when including the proposed mediator and the independent variable as predictors of the dependent variable, and (c) the indirect effect of the mediating variable is significant (cf. Sobel, 1982).

Before conducting the mediation analyses, we first tested the assumption of homogeneity of regression by simultaneously regressing competition on guilt, empathy, the assessments of max own, max rel, max joint, min dif, and the relevant two- and three-way interactions. The assumption of homogeneity of regression would be violated if any of the three-way interactions were significant. None of the three-way interactions were significant ( $F_s < 1$ ).

As previously indicated, the first mediation condition was satisfied. The effect of the Empathy  $\times$  Guilt interaction was significant for max own,  $B = .50$ ,  $SE = .20$ ,  $p < .02$ ; max rel,  $B = .55$ ,  $SE = .18$ ,  $p < .004$ ; max joint,  $B = -.47$ ,  $SE = .21$ ,  $p < .03$ ; and min dif,  $B = -.49$ ,  $SE = .20$ ,  $p < .02$ . However, when competition was simultaneously regressed on max own, max rel, max joint, and min dif, only max own ( $B = .58$ ,  $SE = .17$ ,  $p < .003$ ) and max joint ( $B = -.61$ ,  $SE = .18$ ,  $p < .001$ ) were significant. The effect of min dif was marginal,  $B = -.34$ ,  $SE = .18$ ,  $p < .07$ , and the effect of max rel was nonsignificant,  $B = .17$ ,  $SE = .17$ ,  $p < .31$ . Because max rel and min dif did not significantly predict competition when max own and max joint were entered into the model, we excluded max rel and min dif from further tests of mediation.

For max own and max joint, the second mediation condition also was satisfied. When max own, max joint, empathy, guilt, and Empathy  $\times$  Guilt were simultaneously entered into a regression model predicting competition, the Empathy  $\times$  Guilt interaction became nonsignificant,  $B = .08$ ,  $SE = .24$ ,  $F(1, 60) = .12$ ,  $p < .73$ , whereas the effects of max own,  $B = .72$ ,  $SE = .16$ ,  $F(1, 60) = 19.84$ ,  $p < .001$ , and max joint,  $B = -.81$ ,  $SE = .16$ ,  $F(1, 60) = 27.16$ ,  $p < .001$ , both remained significant.

The final step in the mediation analysis was to test the significance of the indirect effects. MacKinnon et al.'s (2002)  $z'$  test for mediation was used to test the significance of each of the indirect effects. According to MacKinnon et al. (2002), the critical  $z'$  values for testing mediation are .97 for  $\alpha = .05$  and 1.10 for  $\alpha = .01$ . Except for the difference in critical values, the MacKinnon  $z'$  test is equivalent to Sobel's (1982) test for mediation. Both indirect effects were significant: max own mediation,  $z' = 2.72$ ,  $p < .01$ , and max joint mediation,  $z' = 2.82$ ,  $p < .01$ .

It should be noted that assumptions regarding mediation may be violated. First, because the reasons

assessments contained measurement error, the relationships between the reasons and competition could be spurious. Second, because the reasons assessments took place after the assessment of competition, it could be that competition caused max own and max joint, instead of the reverse. That is, it is possible that the reasons participants gave for their PDG choice were consequences of their choice, as opposed to causes. Therefore, although the mediational analyses are consistent with the possibility of full mediation by max own and max joint, they do not provide definitive evidence for such mediation. Nonetheless, the results of the mediation analyses are consistent with the possibility that high-guilt participants who empathized with their ingroup were concerned with maximizing the absolute outcomes of their ingroup and not maximizing the joint outcomes of the two groups.

## DISCUSSION

The results of Study 2 provide experimental support for the proposed role of group morality in intergroup conflict. Relative to instructed objectivity, ingroup empathy led high-guilt group members to behave competitively. This pattern of results is consistent with the possibility that guilt-prone group members' concern for behaving in line with moral norms motivated them to act competitively.

Adherence to group morality should lead to increased concern for maximizing the ingroup's outcomes and decreased concern for maximizing the joint outcomes of the ingroup and outgroup. Consistent with this reasoning, we found evidence suggesting possible mediation by both max own and max joint. We did not find significant mediation by max rel or min dif. However, the nonsignificance of max rel and max joint in predicting competition could be due to the relatively high correlations among the reasons variables. When separate regression equations were computed for each of the reasons variables, both max rel and min dif significantly mediated competition.

### *Study 2 Conclusion*

Group morality requires that group members act for the good of the ingroup. In noncorrespondent situations such as the prisoner's dilemma (Kelley & Thibaut, 1978), increasing the outcomes of the ingroup requires reducing the outcomes of the outgroup. What is particularly striking about the results from Study 2 is that group members who were supposedly the most moral—group members who were prone to experiencing guilt—were the most competitive. This finding is consistent with the assumption that moral norms for groups

encourage negative behavior toward outgroups. That is, the guilt-prone group members who competed were not acting immorally—they were acting for the good of their ingroup via actions consistent with group morality.

## GENERAL DISCUSSION

In this article, we investigated how group morality affects intergroup conflict. Our results suggest that group morality encourages violent (Study 1) and competitive (Study 2) behavior toward outgroups, possibly because of the perceived or actual noncorrespondence inherent in many intergroup interactions. Past experimental studies (e.g., Wildschut et al., 2002) and a meta-analysis (Wildschut et al., 2003) have all found that as noncorrespondence increases, so does the tendency for groups to make more competitive PDG responses than individuals.

In Study 1, we found that for preindustrial societies throughout the world, as ingroup loyalty increased, the tendency to value outgroup violence more than ingroup violence increased, as did the tendencies to engage in more external than internal warfare and to enjoy war. In Study 2, we found that high-guilt participants (i.e., those likely to be concerned with moral behavior) who empathized with their ingroup acted more competitively toward an outgroup than high-guilt participants who did not empathize with their ingroup. The fact that differences were found primarily among high-guilt group members suggests that intergroup relations are governed by the codes of group morality. In sum, our cross-cultural and experimental findings both suggest that group morality is associated with intergroup conflict.

### *Terrorism and Group Morality*

The findings from the present investigation are especially important in light of recent terrorist attacks in the United States, the Middle East, and throughout the world. According to an investigation of terrorist networks by Sageman (2004), "The perpetrators of the hijackings on September 11 did not show the slightest sign of belligerence. They were not hostile, violent, or macho throughout their yearlong stay in the United States. Yet, when the moment came, they killed enthusiastically" (p. 82). A separate review of "the mind of the terrorist" by Victoroff (2005) found that terrorists, in general, do not exhibit psychiatric disorders or meet psychiatric criteria for insanity. Rather, this review found that terrorists are often regarded by their ingroup members as "heroic freedom fighters." Victoroff provided evidence suggesting that "with respect to ingroups of identity, certain types of terrorism often represent prosocial behavior" (p. 13).

How can we make sense of these terrorism findings? How can seemingly heroic and moral individuals commit such terrible acts of violence? Sageman's (2004) and Victoroff's (2005) research on terrorism suggests that individuals who engage in terrorism are not in fact immoral: They are simply extremely loyal group members. Likewise, the results from the present studies suggest that when individuals behave violently or competitively toward outgroup members, they are not necessarily acting immorally. Instead, we propose that the immoral consequences of intergroup conflict are often the unfortunate result of moral intentions.

## NOTES

1. Although collectivism and individualism are commonly examined in cross-cultural research, the Standard Cross-Cultural Sample (SCCS) data set does not contain any assessments of collectivism or individualism.

2. The primary reason for using a categorization procedure was to address a potential problem noted during pilot-testing. During pilot-testing, some of the participants told us that they found it difficult to feel empathy for someone whom they had never met and about whom they knew very little. We might have addressed this problem by following the usual procedure of seating the group members in the same room. However, because the manipulation of empathy seemed less problematic when group members were seated in separate rooms, we pilot-tested the categorization procedure and this appeared sufficient to enable empathic feelings.

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