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# Fear and anger as predictors of motivation for intergroup aggression: Evidence from Serbia and Republika Srpska

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Marija Spanovic,<sup>1</sup> Brian Lickel,<sup>2</sup> Thomas F. Denson,<sup>3</sup> and Nebojsa Petrovic<sup>4</sup>

## Abstract

We investigated the relationship between emotions of fear and anger and people's motivation for intergroup aggression within the context of Serbian–Albanian relations in Serbia (Study 1) and Serbian–Bosniak intergroup relations in Bosnia (Study 2). Serbian students in Belgrade and Banja Luka completed a survey that assessed their attitudes towards Albanians or Bosniaks. We found that fear of the outgroup was related to increased motivation for aggression in the context of the ongoing conflict in Serbia, whereas fear was negatively related to aggression in Bosnia, where the conflict had been resolved. The relationships between fear and aggression were significant even after controlling for anger. Furthermore, ingroup affiliation mediated the relationship between fear and aggression in Serbia and between anger and aggression in Bosnia. These findings have implications for conflict resolution efforts in ongoing or intractable conflicts.

## Keywords

anger, fear, ingroup affiliation, intergroup aggression, yielding

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The first decade of the 21st century has been marked by wars, simmering sectarian conflicts and terrorism, resulting in the destruction of many societies' physical and civic infrastructure, and death, dislocation, and psychological trauma for millions of people. However, these costs are not inevitable. Alternatives to war, prevention of terrorism, and reconciliation after civil conflict are possible. Examples of successes, including conflict resolution in Northern Ireland and post-war Bosnia, suggest the potential value of further research on the factors that influence people and

societies affected by intergroup conflict and aggression. One important question for psychologists

<sup>1</sup> University of Southern California

<sup>2</sup> University of Massachusetts Amherst

<sup>3</sup> University of New South Wales

<sup>4</sup> University of Belgrade

## Corresponding author:

Marija Spanovic, University of Southern California, Seeley G. Mudd Building, Room 501, Los Angeles, CA, 90089-1061, USA.

[email: [spanovic@usc.edu](mailto:spanovic@usc.edu)]

studying violent intergroup conflict concerns how different emotions evoked by the conflict are linked to people's support for aggressive action. As we will discuss, most recent research highlights the importance of anger in intergroup aggression. We argue that under some circumstances, fear may also be linked to aggression. In our research, we examined the role of fear and anger in predicting support for outgroup-directed aggression in the context of ethno-political conflict in Serbia and Bosnia.

### *Anger and intergroup aggression*

A large body of research indicates that anger is linked to aggression. Individuals high in trait anger show higher levels of aggression (Bettencourt, Talley, Benjamin, & Valentine, 2006; Robinson & Wilkowski, 2010). Furthermore, laboratory studies of aggression generally induce aggression by manipulations that induce anger (Anderson & Bushman, 2002). Anger has also been shown to evoke approach motivation (Amodio, Shah, Sigelman, Brazz, & Harmon-Jones, 2004; Carver & Harmon-Jones, 2009; Harmon-Jones & Sigelman, 2001). Thus, when angered, individuals tend to approach the source of the anger with the goal of confronting it.

Anger is also a potent predictor of aggression in intergroup contexts. For example, Mackie, Devos, and Smith (2000) examined fear and anger within the context of value conflicts about the use of illegal drugs and homosexual rights. Across three studies, they found that participants who thought that their ingroup's position in the argument over the value conflict was strong were more likely to experience anger, and this anger predicted motivations to confront and move against the outgroup. Likewise, research examining Americans' reactions after the 9/11 terrorist attacks shows that anger consistently predicted support for military action (Cheung-Blunden & Blunden, 2008; Sadler, Lineberger, Correll, & Park, 2005; Skitka, Bauman, Aramovich, & Morgan, 2006).

### *Fear and intergroup aggression*

Relative to anger, the possible role of fear in group-based aggression is much less clear.

Researchers have long viewed anger as associated with 'fight' responses but fear with 'flight' responses (Cannon, 1932). In past research on group-based aggression, studies have often found that fear is not linked to motivation for aggression. For example, Mackie et al. (2000) found that in value conflicts, fear predicted moving away from, rather than confronting, opponents. Likewise, the research on emotions and policy support after 9/11 consistently showed that anger, but not fear, was associated with support for military action in response to the attack (Cheung-Blunden & Blunden, 2008; Sadler et al., 2005; Skitka et al., 2006).

Despite this past research, we believe that the case against the role of fear in intergroup aggression is not yet closed. Much of our understanding of the role of fear in intergroup conflicts comes from research on non-violent value conflicts and Americans' reactions following the 9/11 attacks. Although these are informative contexts to study, there is reason to believe that fear can sometimes play a stronger role in potentially violent civil conflicts in which people face outgroup members within the confines of a shared territory. For example, in the context of the Arab-Israeli conflict Jarymowicz and Bar-Tal (2006) reported that Israeli 'hawks', who objected to compromises in the peace process were characterized by higher fear orientation than that of 'doves' who instead tended to support such compromises. Their analysis suggests that the extent to which threats are perceived as avoidable or easily managed may influence the extent to which fear influences intergroup aggression. In instances in which conflict is avoidable or easily managed, fear may not be linked to aggression. However, when conflict feels unavoidable, fear may be likely to precipitate aggression (Bandura & Walters, 1959; Blanchard & Blanchard, 1984; Plutchik, 1990).

Further support for a possible role of fear in intergroup aggression comes from a closer examination of research on Americans' affective responses after 9/11. The studies that examined the 9/11 attacks focused on the emotions experienced *as a result* of the attacks. Although this was a very reasonable strategy in this research, this way of assessing the role of fear in aggression

may be different than what would be found by considering the emotions that are evoked by considering possible future attacks. As an example, consider research conducted by Huddy, Feldman, Taber, and Lahav (2005) on post 9/11 policy attitudes. They differentiated between anxiety and perceptions of threat and showed that perceptions of threat, and not anxiety, predicted support for aggressive military actions by the US. However, their measures of anxiety were framed in terms of the feelings induced by the terrorist events that have already happened, whereas their measures of threat perceptions refer to the degree to which people reported being concerned about the possibility of *future* attacks. Given that manipulations of fear are known to increase risk assessments of future threats (Lerner, Gonzalez, Small, & Fischhoff, 2003), it seems possible that under some circumstances fear itself may affect perceptions of the threat of future aggression from a hostile outgroup and thereby prompt defensive aggression to prevent harm. This line of reasoning is also supported by what we know from past laboratory research on the interindividual-intergroup discontinuity effect (Schopler & Insko, 1992; Insko & Schopler, 1998; Pemberton, Insko, & Schopler, 1996; Wildschut, Pinter, Vevea, Insko, & Schopler, 2003). This research indicates that fear and distrust are generally increased in intergroup settings, and it would therefore not be surprising if fear sometimes motivates “preventive” aggression in real-world conflict.

Other research points more directly to a possible role for fear in group-based aggression (Skitka et al., 2006; Skitka, Bauman, & Mullen, 2004). For example, Skitka et al. (2006) found that fear predicted support for deporting Muslims after 9/11. Although in the context of the post 9/11 United States, deportation of Muslims could be framed as an issue of intolerance rather than group-based aggression, the link between fear and support for “removing Muslim people from the country” takes on a different meaning when considered in light of the ethnic cleansing that has occurred in violent civil conflicts within multi-ethnic societies such as the former Yugoslavia. In these contexts, ethnic cleansing

was part and parcel of violent conflict rather than an alternative to violence. Likewise, Skitka et al.’s (2004) longitudinal research found that fear induced by 9/11 predicted an increase in perceptions of threat (for parallel experimental evidence, see Lerner et al., 2003). Threat perceptions, in turn, predicted increasing levels of intolerance against Muslims, Arabs, and first-generation immigrants. The research conducted by Skitka and colleagues makes clear that we should think of fear as not only linked to the classic “flight” response, but also to increased intolerance of those categorized as part of the threatening outgroup and a desire to *make those people take flight* (i.e., support for deportation).

Thus, taken together, several lines of evidence suggest a role for fear in augmenting intergroup aggression. Fear is linked to increased threat perceptions, to intolerance of members of the threatening outgroup and support for forcibly removing outgroup members from shared territory (i.e., deportation of Muslims from the U.S. after 9/11), and sometimes to opposition to compromise with the outgroup (i.e., Israeli hawks vis à vis Arabs). Our goal in the context of the Balkans was to examine the conditions under which fear might be linked to aggression. We hypothesized that fear would play a different role in the context of a largely resolved conflict compared to one in which the future of the conflict, and potential losses, are unresolved. Because the function of fear is primarily to cope with possible future threats and these feelings are increased in situations of uncertainty (Öhman, 2000), we expected that fear would play a different role in the context of a well-resolved conflict compared to one in which the outcome and possible harm from the outgroup is unresolved. Thus, we examined fear and anger amongst Serbs in Bosnia (a conflict people largely frame in terms of the past, and which is largely resolved even if full reconciliation is not yet achieved) compared to fear and anger amongst Serbs in Serbia about Kosovar Albanian efforts to separate Kosovo from Serbia and to possibly form a larger political entity of greater Albania (a conflict people frame as about the future of Serbia, and the outcome of which is uncertain).

### *Desire for ingroup affiliation and ingroup strength*

In conducting our research, we were also interested in examining variables that might mediate the relationships between fear and anger and support for outgroup-directed aggression. Although there are of course many variables that could be examined, we focused on two variables as having particular theoretical importance. These two potential mediators were *affiliation with the ingroup* and the *perceived strength of the ingroup*.

Those who experience fear often cope with it by affiliating with others. For instance, in Schachter's (1959) classic experiment, participants awaiting painful electrical shocks preferred to wait with others who also faced the threat, rather than wait alone. Specifically, when threatened, participants were motivated to affiliate with others who were in a similarly threatening situation. Additional research suggests that when threatened, individuals prefer the presence of those with whom they have common bonds (Kugihara, 2005). Moreover, groups engaged in conflict focus their affiliation inward and these insular within-group processes can negatively affect their relationships with outgroups (Smith, 2008). In intergroup situations, when facing threat from an outgroup, individuals are likely to find the presence of other ingroup members comforting. Although research has not examined this question conclusively, it does seem likely that affiliation would affect variables, such as ingroup identification, attitude polarization, and conformity that could be linked to aggression. There is some research to suggest that processes linked to affiliation are linked to group-based aggression. People in groups (compared to individuals) tend to be more aggressive toward individual targets (Jaffe, Shapir, & Yinon, 1981; Jaffe & Yinon, 1979) and intergroup interactions tend to be more aggressive than interpersonal interactions (Hoyle, Pinkley, & Insko, 1989; Mikolic, Parker, & Pruitt, 1997). Furthermore, those who are highly identified with their ingroup are more likely to endorse aggression toward the outgroup (Stenstrom, Lickel, Denson, & Miller, 2008; Struch & Schwartz, 1989).

In addition to assessing perceptions of ingroup affiliation, we also believed it was vital to assess people's perceptions of the strength of the ingroup as a potential mediator between emotions and support for outgroup-directed aggression. Prior research shows that perceptions of strength and collective support have an important role in the context of value conflicts (Mackie et al., 2000). Mackie and colleagues in fact identified ingroup strength as an important antecedent that differentiated feelings of anger vs. fear. Specifically, perceptions of ingroup strength led to anger and consequently aggression. Although their work highlights the importance of perceptions of strength as an antecedent to feeling anger, we suggest that emotions can also directly influence perceptions of strength, which in turn affects action tendencies (in particular, aggression). As noted by Skitka et al. (2004), in intergroup contexts emotions may themselves shape not only people's motivations but also appraisals of the ingroup and the intergroup context itself, an insight highlighted in Appraisal Tendency Theory (e.g., Lerner & Keltner, 2000, 2001; Lerner & Tiedens, 2006). Thus, in our research we examined strength as a potential mediator of the link between emotions and action tendencies.

The final issue we consider in relation to perceptions of ingroup strength and affiliation motives is the possible relationship between these two variables themselves. In fact, affiliation may lead one to perceive ingroup members as united in the same cause and therefore strong and capable to win the conflict. This sense of unity or strength that results from affiliation is likely to motivate ingroup members to respond aggressively (e.g., Mackie et al., 2000; van Zomeren, Spears, Fischer, & Leach, 2004). Ingroup affiliation is therefore particularly important because it may offer information about perceived group strength as well as when groups choose to aggress or yield.

### *Overview of studies*

The effects of fear, anger, affiliation, and strength on intergroup aggression and yielding tendencies

were investigated in Serbia and Bosnia. Because yielding to the outgroup is an alternative to aggression in intergroup settings we examined it as another important outcome variable in addition to aggression (De Dreu, 2010). In both countries, Serbs answered questions about their feelings regarding their ingroup's relationship with Muslims (i.e., Albanians in Serbia/Kosovo in Study 1, and Bosniaks in Bosnia in Study 2). The two samples, though ethnically and culturally similar, differ in the quality of intergroup relations. In Serbia, the conflict between Serbians and Albanians has not yet been resolved and there is great uncertainty about the outcome in Kosovo and Serbian–Albanian relations. By contrast, in Bosnia, relations have been stable since the end of open conflict in late 1995. To our knowledge there have been no instances of armed conflict in Bosnia since 1995. Furthermore, support for nationalistic parties has declined in the period of 1996–2002, municipalities are increasingly compliant with power-sharing requirements that assure representation of all ethnic groups, and national parties occasionally seek out inter-ethnic alliances (Caspersen, 2004).

## Study 1

The present study focused on the conflict between Muslim Albanians and Christian Serbs living in Kosovo and Serbia. The history of this conflict dates back several centuries; however, the most recent hostilities between the two ethnic groups began in the Serbian province of Kosovo in the late 1990s. Even though the violence is now over, the peace process has not been fully completed and the status of Kosovo remains unresolved. Kosovo, with its Albanian majority, declared independence from Serbia in 2008 and even though it is largely recognized by the international community, Serbia does not recognize its independence. The instability in Kosovo has the potential to spill over into the entire region where ethnic Albanians reside, including southern Serbia, Montenegro, and Macedonia. Many Serbians fear that current developments in the region are an attempt at creating Greater Albania

and expanding Muslim influences in Europe. The idea of Greater Albania has existed for decades and it was briefly fulfilled during the Second World War when Kosovo was annexed to Albania (Hagen, 1999). As recently as September, 2009, a news article on the website of the Radio Television Serbia (RTS)—a primary news agency in Serbia—reported a statement by the Albanian prime minister who said that obstacles that are preventing Albanians from living together on the united territory should be removed (RTS, 2009).

## Hypotheses

In the context of an unresolved intergroup conflict in Serbia, both fear and anger were considered important determinants of intergroup aggression. Specifically, it was expected that fear would be positively related to aggressive tendencies even after controlling for anger. However, we did not expect fear to be related to yielding. Furthermore, we expected that ingroup affiliation would mediate the fear–aggression relationship.

## Method

### Participants

The sample consisted of 126 psychology undergraduates (20 males and 106 females; median age = 22) at the University of Belgrade. The vast majority of participants (96%) identified as Serbian. One student identified as Muslim, one as international, one as Montenegrin, one was of mixed Serbo-Romanian origin, and one student did not report her nationality.

### Procedure

Participants completed the survey assessing their emotions toward Albanians, their motivation for aggression toward Albanians, motivation to yield to Albanians, ingroup affiliation, and perceived ingroup strength<sup>1</sup>. The survey was completed during a class session. Participants were informed that the study investigated ethno-political relations in Serbia. All the items were answered using a 7-point

Table 1. Zero-order correlations of Study 1 variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fear (1)	—	.59**	.36**	.05	.33**	-.16	.34**
Anger (2)		—	.35**	.07	.33**	-.12	.35**
Affiliation (3)			—	.37**	.45**	-.22**	.34**
Strength (4)				—	.32**	-.03	.20*
Aggression (5)					—	-.51**	.56**
Yielding (6)						—	-.30**
Threat (7)							—

Note. \*\* Correlation is significant at the .01 level. \* Correlation is significant at the .05 level.

scale with described endpoints (1 = I don't want that at all, 7 = I want that very much, except when indicated differently). Participants answered questionnaires in Serbian. The materials were translated and back-translated by the first author.

### Measures

**Aggression measure** Participants rated a number of items assessing intent to harm Albanians consisting of military action, economic sanctions, and restriction of civil liberties. Five items assessed willingness to engage in military action (e.g., "If I could vote about these things, I would vote for Serbian Military to launch military campaign against Albanians"). The next set of items assessed the degree to which participants wished to impose economic sanctions on Albanians (e.g., "I would vote for the Serbian government to restrict Albanian businesses"). A final set of items assessed the desire to restrict Albanian civil liberties (e.g., "If I could vote about these things, I would vote for Albanians not having the same rights as Serbs"). These items were used to form a reliable ( $\alpha = .93$ ) aggression composite score that was used in the analyses. Zero-order correlations with other variables appear in Table 1. The mean and standard deviation of aggression measure (and all other measures) are reported in Table 2.

**Yielding motivation** We constructed six items to measure tendencies to yield to the outgroup. For example, participants rated their agreement

with the following items: "If I could vote for these things, I would vote for withdrawal of Serbs from Kosovo" and "I would vote for Serbia to give in to Albanian demands." The reliability was adequate ( $\alpha = .78$ ).

**Intergroup emotions** Participants rated the extent to which the situation between Serbs and Albanians elicited a total of 27 emotion descriptors including fear and anger (1 = not at all, 7 = very much). The anger composite consisted of the following items: angers, infuriates, causes ill will, frustrates ( $\alpha = .82$ ), whereas fear items were as follows: makes fearful, afraid, makes insecure about Serbian existence, worries ( $\alpha = .89$ ).

**Ingroup affiliation** Three items measured the degree to which other Serbs satisfy the need for affiliation in the face of threat. Participants answered about how would they respond if another nation threatened Serbia (i.e., "I would seek company of other Serbs", "I would feel that only other Serbs can understand my worry in regards to this, whereas people of other nations would not," and "I would feel closer to other Serbs,"  $\alpha = .87$ ). All three items were averaged to form an ingroup affiliation composite.

**Ingroup strength** Perceived ingroup strength was measured with seven items adapted from Mackie et al. (2000). For example, participants answered: "Serbs are more powerful than

Albanians” and “If there was a war, Serbs would win” ( $\alpha = .86$ ). The items were averaged to form an ingroup strength composite.

**Threat** Participants answered one item that assessed the degree of threat. Specifically, they rated the following item: “Albanians are dangerous and a threat to Serbs.”

## Results and discussion

### *Fear, anger, and intergroup aggression*

As noted in Table 1, fear was significantly correlated with aggression and it had a marginally significant negative relationship with yielding. Anger was also a significant positive correlate of aggression. When controlling for anger, fear remained a marginal predictor of aggression,  $b = .22$ ,  $t(108) = 1.92$ ,  $p < .06$ ; and when controlling for fear, anger remained a significant predictor of aggression,  $b = .21$ ,  $t(108) = 1.99$ ,  $p < .05$ . Thus, consistent with our hypotheses, in the context of an ongoing, unresolved intergroup conflict, both fear and anger were predictors of aggression.

### *Structural Equation Modeling (SEM)*

We used SEM with observed variables (also known as path analyses) to simultaneously test the relationships between fear, anger, affiliation, strength, yielding, and aggression (see Figure 1). The goodness-of-fit of this model was evaluated using criteria recommended by Hu and Bentler (1999). Specifically, a chi-square value that is non-significant, an  $RMSEA < .08$ , and a  $CFI > .95$  indicates good model fit (Hu & Bentler, 1999). This model was an excellent fit to the data:  $\chi^2(3) = 2.17$ ,  $p = .54$ ,  $RMSEA = .00$ ,  $CFI = 1.00^2$ . As expected, fear was related to affiliation, which was, in turn, positively related to strength and aggression. Preacher and Hayes’ (2004) SPSS macro was used to assess whether ingroup affiliation mediates the relationship between fear and aggression. This analysis indicated that partial mediation occurred (Sobel  $Z = 2.91$ ,  $p < .01$ ).

Strength, however, did not mediate the relationship between ingroup affiliation and aggression, Sobel  $Z = 1.30$ ,  $p = .19$ . It also did not mediate the relationship between fear and aggression, Sobel  $Z = .51$ ,  $p = .61$ . Furthermore, in our SEM model anger had a direct positive relationship to aggression, whereas its relationship to affiliation was marginally significant. Fear was not related to yielding and affiliation had a negative relationship with yielding. Yielding and aggression had a strong negative relationship.

**Summary** As expected, in the context of prolonged conflict, fear predicted motivation for aggression. Furthermore, the relationship between fear and aggression was mediated by affiliation, whereas anger had a direct relationship to aggression. Perceived strength was not a mediator of fear–aggression or affiliation–aggression link. Furthermore, fear was not a significant predictor of yielding and affiliation had a negative relationship with yielding.

## Study 2

This study investigated the conflict between Muslim Bosniaks and Bosnian Serbs living in Bosnia. The war in Bosnia started in 1992 and ended in 1995. As a consequence of the war, the former Yugoslav republic Bosnia and Herzegovina was internationally recognized as a separate country and divided into two governing entities: the Federation of Bosnia and Herzegovina and Republika Srpska. The former entity is governed and primarily inhabited by Muslim Bosniaks and Bosnian Croats, whereas the latter entity is governed and primarily inhabited by Bosnian Serbs. Since the war, life in Bosnia has largely normalized and the two entities have established peaceful interrelationships. Even though some resentment still exists, the quantity and quality of intergroup contact seems to be increasing, and contact is linked to improving intergroup attitudes (Cehajic, Brown, & Castano, 2008; see also Whitt & Wilson, 2007).

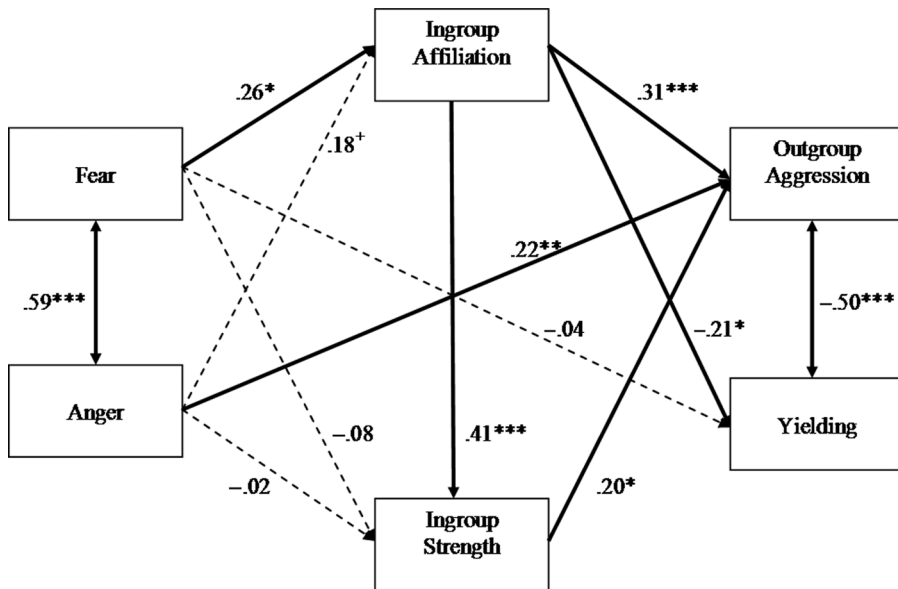


Figure 1. Structural Equation Model of Study 1 variables, including fear, anger, ingroup affiliation, strength, yielding, and outgroup aggression. Paths with single-headed arrows represent directional effects and paths with double-headed arrows represent non-directional correlations. The model reports standardized regression weights. Bolded paths are significant ( $p < .05$ ).

## Hypotheses

In Bosnia, where the conflict has largely been resolved, anger was expected to be a determinant of motivation for intergroup aggression, whereas we expected fear to be unrelated or negatively related to motivation for intergroup aggression. In contrast, we expected that fear would have a positive relationship with yielding motivation.

## Method

### Participants

The sample consisted of 132 psychology undergraduates (21 males, 107 females, four participants did not report their gender; median age = 22) at the University of Banja Luka. The majority of participants (94%) identified as Serbian. Five did not report their ethnicity, one was Bosniak, one Croat, and one was of a mixed Serbo-Croatian origin.

### Procedure and materials

The procedure and materials were identical to Study 1, with one exception. Specifically, instead of Albanians, participants answered the questions about Bosniaks.

## Results and discussion

### Comparison of Bosnian and Serbian intergroup contexts

Means and standard deviations of Study 1 and Study 2 variables are presented in Table 2. As expected, intergroup relations in Bosnia ( $M = 2.98$ ,  $SD = 1.46$ ) were perceived as less threatening than those in Serbia ( $M = 4.03$ ,  $SD = 1.60$ ). Bosnian participants also felt less fear and anger and expressed less motivation for aggression compared to Serbian participants (see Table 2). All of these comparisons were significant at the .001 level. These data suggest that conflict in

Table 2. Means and standard deviations of Study 1 and Study 2 variables

	Study 1	Study 2
Fear	3.98 (1.38)	2.88 (1.39)
Anger	3.59 (1.49)	2.81 (1.44)
Affiliation	3.61 (1.53)	4.46 (1.64)
Strength	2.58 (.98)	3.25 (1.13)
Aggression	3.24 (1.40)	2.18 (1.14)
Yielding	2.65 (1.08)	4.10 (1.37)
Threat	4.03 (1.60)	2.98 (1.46)

Bosnia is perceived to have been largely resolved, whereas in Serbia it is still ongoing and salient.

### *Fear, anger, and intergroup aggression*

Table 3 presents the zero-order correlations for all of the variables. As expected, fear was not related to aggression, but it was positively associated with yielding motivation. Anger was also a significant correlate of aggression and unrelated to yielding. When controlling for anger; fear in fact had a significant negative relationship to aggression,  $b = -.24$ ,  $t(115) = -3.44$ ,  $p = .001$ , and when controlling for fear, anger remained a significant predictor of aggression,  $b = .53$ ,  $t(115) = 7.98$ ,  $p < .001$ . Consistent with our hypotheses, in the context of a resolved intergroup conflict, fear had a negative relationship with aggression, whereas anger was positively associated with aggression.

### *Structural Equation Modeling*

As in Study 1, SEM with observed variables was used to simultaneously test the relationships

between fear, anger, affiliation, strength, yielding, and aggression (see Figure 2). This model was an excellent fit to the data:  $\chi^2(3) = .16$ ,  $p = .98$ ,  $RMSEA = .00$ ,  $CFI = 1.00^3$ . It is worthy to note that fear had a negative relationship with aggression and a positive relationship with yielding. Anger, on the other hand, was both directly and indirectly linked to aggression through affiliation and strength. Affiliation was also a predictor of aggression, but it was not significantly related to yielding. Aggression and yielding were not related.

As expected, in the context of a resolved intergroup conflict, the relationship between anger and aggression was mediated by ingroup affiliation and strength, whereas fear had a direct negative relationship with aggression. Preacher and Hayes' (2004) SPSS macro was used to assess whether ingroup affiliation mediated the relationship between anger and aggression. The relationship between anger and aggression significantly dropped after affiliation was taken into account (Sobel  $Z = 2.88$ ,  $p < .01$ ), however it still remained significant ( $b = .32$ ,  $p < .001$ ), indicating that partial mediation occurred. Strength also partially mediated the relationship between ingroup affiliation and aggression (Sobel  $Z = 1.97$ ,  $p < .05$ ). In this study, fear was also positively related to yielding and affiliation was unrelated to yielding.

## General discussion

Intergroup conflicts that threaten one's life, family, and national sovereignty evoke strong emotions, in particular anger and fear. Anger clearly plays a strong role in fueling intergroup conflicts and may be a key reason why cycles of intergroup

Table 3. Zero-order correlations of Study 2 variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fear (1)	—	.53**	.21*	-.04	.08	.23**	.21*
Anger (2)		—	.38**	.18	.52**	.13	.38**
Affiliation (3)			—	.29**	.46**	-.05	.40**
Strength (4)				—	.34**	-.01	.29**
Aggression (5)					—	-.06	.42**
Yielding (6)						—	-.12
Threat (7)							—

Note. \*\* Correlation is significant at the .01 level. \* Correlation is significant at the .05 level.

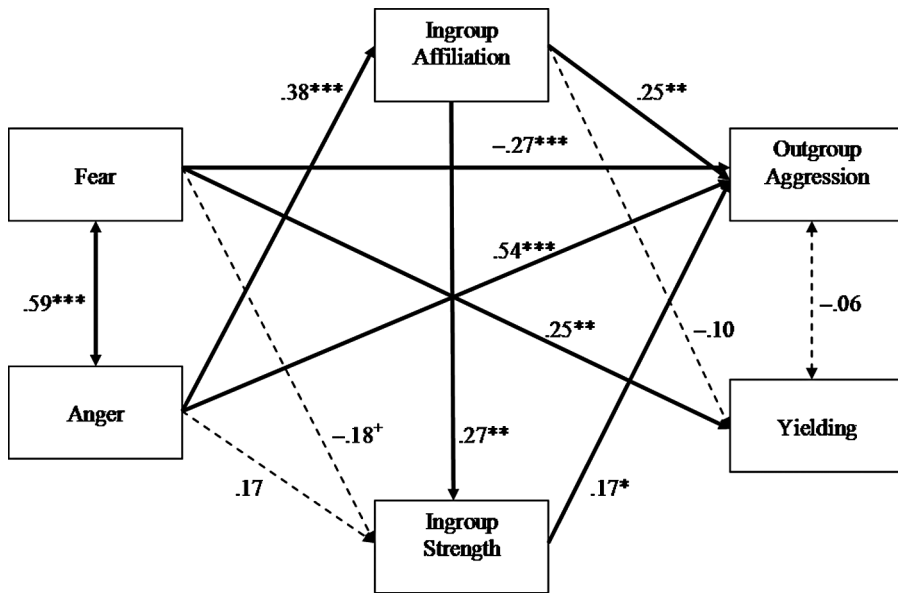


Figure 2. Structural Equation Model of Study 2 variables, including fear, anger, ingroup affiliation, strength, yielding, and outgroup aggression. Paths with single-headed arrows represent directional effects and paths with double-headed arrows represent non-directional correlations. The model reports standardized regression weights. Bolded paths are significant ( $p < .05$ ).

violence and retribution are hard to break (Lickel, Miller, Stenstrom, Denson, & Schmader, 2006). Although we agree that fear certainly plays a different role in conflict than anger, we argue the assumption that fear always motivates “flight”—and never aggression and violence—should be reconsidered. The goal of our research was to build on the ideas and findings of others that pointed towards this possible role of fear in intergroup aggression (e.g., Jarymowicz & Bar-Tal, 2006; Inkso & Schopler, 1998; Skitka et al., 2004) by investigating the role of fear and anger in the context of intergroup relations in Serbia and Bosnia. Before discussing future directions in this line of research, we briefly summarize the three key findings from our studies.

First, and most important, we found clear evidence of a role for fear in predicting motivations for intergroup aggression in the context of Serbian reactions to Kosovo and the threat of Kosovar independence and the possible formation of a greater Albania incorporating elements

of current and historical Serbian territory. Relative to a more “settled” conflict (that between Serbs and Bosniaks in Bosnia which we assessed in Study 2), participants in our first study expressed high levels of threat, fear, anger, and motivation for aggression towards Albanians. We would argue that in the context of an unresolved intergroup conflict in which the outcome and future are quite uncertain, fear about the future and the threat posed by the outgroup may sometimes be a potent fuel for intergroup aggression. In fact, the intergroup appraisals associated with fear may in many ways provide even stronger justifications for aggression than do those associated with anger. For example, although research (e.g., Cheung-Blunden & Blunden, 2008; Sadler et al., 2005; Skitka et al., 2006) indicates that anger was a strong predictor for overseas military action after 9/11 (first in Afghanistan and then Iraq), the political arguments about why military action were needed were primarily based around reducing the threat posed by Al Qaeda or weapons of

mass destruction (in Iraq) rather than on revenge or restoring America's honor after provocation. Thus, fear about, as well as anger towards, hostile outgroups provides a basis for motivating aggression. Based on our analysis, we would argue that fear is most likely to play a role in those circumstances in which conflict is appraised as unavoidable but in which the nature of the outcome is uncertain. Clearly, more research, both from field settings as well as studies using experimental designs, is needed to test these ideas further.

The second key finding from our studies concerns the role of anger in predicting motivations for aggression. Although the link between anger and aggression has been found in many prior studies, our studies were novel for examining this topic in the context of two different violent civil conflicts, one of which is largely resolved (Bosnia) and another which is still unfolding (Kosovo). We also believe it is important to highlight a particular finding from our studies and place it into the context of past research conducted in the United States after 9/11. As we described earlier, we examined three components of aggression in each study, namely, support for economic sanctions, reductions in civil rights, as well as overt military action. We found that these three components of aggression were actually strongly related to one another. Most research examining the role of fear and anger in reactions to 9/11 operationalized aggression in terms of military action. Some of the research conducted after 9/11 (e.g., Skitka et al., 2004) found that fear was linked to intolerance and support for deportations of Muslims and Arabs. In the context of American reactions to 9/11, this intolerance and support for deportation can be contrasted with support for overseas military action, but in other contexts such as violent civil conflicts these "intolerance" forms of aggression may be more closely linked with support for more direct violent action against the outgroup.

The third finding that we wish to highlight concerns the important role of ingroup affiliation in mediating the link between emotions and support for intergroup aggression. In the context of the unresolved conflict in Kosovo/Serbia

(Study 1), affiliation mediated the relationship between fear and aggression and in Study 2 (Bosnia/Republika Srpska) it mediated the relationship between anger and aggression. We believe that the role of ingroup affiliation in augmenting intergroup aggression warrants further investigation. Clearly, affiliation with others during an intergroup conflict is not just a psychological process, but often a behavioral one as well. Banding together during threat provides for physical safety as well as psychological assurance. Our studies reported desire for affiliation with others, but future research should expand this to examine behavioral assessment of affiliation as well. A number of intragroup processes may account for why affiliation may be linked to aggression. For instance, affiliation may induce collective rumination about how to deal with outgroup threat. Such threats are likely to prime thoughts about other past events where the ingroup was victimized by the outgroup. Serbs who were threatened by the breakup of former Yugoslavia seemed to have engaged in collective rumination that was heavily focused on the losses and suffering that they endured from Muslims in past centuries. This may have resulted in group polarization, where the ingroup was ready to endorse extreme aggressive action towards the outgroup after ingroup affiliation and collective rumination processes have taken place. Investigating the role of affiliation processes in intergroup conflicts also seems important because of the role that affiliation may play in the conflict resolution process. For example, ingroup affiliation processes could be channeled as suggested by Smith (2008). Media could be used to encourage positive outgroup-directed affiliation, while simultaneously minimizing ingroup directed affiliation. For example, media could emphasize the prior instances of intergroup cooperation or depict the suffering of outgroup members as a result of the conflict, but without maligning the ingroup. This may encourage outgroup affiliation and disrupt negative effects of ingroup affiliation.

With regard to the finding in Study 2 that affiliation partially mediated the relationship between

anger and aggression, one interpretation of our results is that angry affiliation led to aggression in part by influencing perceptions of ingroup strength. Individuals who felt angry at the outgroup may express that anger to likeminded ingroup members who found themselves in the same situation. Turning to other ingroup members in this way (*viz.*, affiliation) may give the individual the perception that the ingroup is united in the same cause: willing to engage in the conflict with and capable of defeating the outgroup. This sense of ingroup strength thereby led to increased aggression or perceived capacity for collective action (e.g., Mackie et al., 2000; van Zomeren et al., 2004).

### *Future directions*

The current studies were motivated by a desire to further investigate the role of emotion in intergroup conflict, in particular the possible role of fear in promoting intergroup aggression under some conditions. There are, however limitations to our current research that are worth noting as other places where future research can improve and extend on our current work.

First, we think that it is important to note that the present research was conducted with university students who typically tend to hold more liberal views than the population as a whole. Generally, as a consequence of disenchantment with the political situation in Serbia and in Bosnia, it is possible that young people tend to ignore political developments in order to protect themselves from further disappointment. If so, the relationship between the emotion and aggression variables might even be stronger among non-student populations. Second, our measurement of aggression assessed participants' desire to harm the outgroup rather than actual aggressive behavior. Although there is a strong basis linking anger and actual aggression in laboratory contexts (Anderson & Bushman, 2002; Bettencourt et al., 2006), there is a lack of laboratory evidence on the effects of fear on aggression, which should be addressed in future research. Third, our measurement of threat in these studies was limited in that it was a single item. Although responses to

this item clearly differentiated our Study 1 and Study 2 samples, future research can productively refine and extend our approach in relation to fear. For example, Cottrell and Neuberg (2005; see also, Stephan & Stephan 2000) have provided an analysis of qualitatively different forms of threat that may be posed by outgroups.

One other area that can benefit from further research is on people's willingness to yield to the other group in the conflict. Clearly, this motivation can encompass a wide range of behaviors from productively negotiating and compromising with members of an outgroup to walling off each group from one another. Other research indicates that yielding to a bargaining or conflict partner is predicted by a different set of variables than withdrawing from contact and negotiation (for a review, see De Dreu, 2010). Future research should continue to explore this distinction in different intergroup conflict settings. Our studies indicate that yielding functions differently in unresolved as compared to resolved conflicts. As might be expected, aggression and yielding were inversely correlated in Study 1 (Serbian reactions to Kosovo). This seems reasonable because the tendency to engage in conflict (*i.e.*, aggression) is diametrically opposed to the tendency to yield or withdraw from the conflict. Interestingly, however, aggression and yielding were not related in Study 2 (Serbian reactions in Bosnia/ Republika Srpska). This may have occurred because, unlike in ongoing conflicts, in resolved conflicts not engaging in aggression does not mean that one is yielding. Furthermore, groups that have overcome war may have developed and learned how to use alternative and more peaceful means of confronting the outgroup. These processes of "peaceful confrontation" may prove important in resolving group conflicts. For example, confronting perpetrators as part of Truth and Reconciliation Commissions may be one example of peaceful confrontation that can serve as an alternative to retributive violence (Lickel et al., 2006). Indeed, under some circumstances, anger can be a powerful motivator for peaceful but forceful social change rather than violence (Thomas, McGarty, & Mavor, 2009; Lodewijkz, Kersten, & van Zomeren, 2008; van Zomeren et al. 2004).

Future research should examine a wider array of behaviors that might be conceived of as measures of peaceful collective action as well as withdrawal and yielding, and examine their role in different kinds of conflicts.

## Conclusions

Our data are important because they suggest that conflict resolution efforts need to consider the psychological effects of fear as well as anger. The reduction of fear may be an important factor that contributes to building trust between groups in conflict. In Northern Ireland, trust between Catholics and Protestants has been linked to positive intergroup behaviors, such as tendencies to approach, spend time, and talk to the outgroup (Tam, Hewstone, Kenworthy, & Cairns, 2009). Moreover, trust had a negative relationship with aggression and avoidance. Although feelings of trust can only arise when one is not feeling aggrieved and angry over past injustices, it seems even more vital to reduce feelings of fear and ensure a sense of order and predictability in the process of conflict negotiation. Thus, conflict resolution efforts in intractable conflicts should attempt to reduce both fear and anger, with the goal of building trust between the groups.

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## Notes

1. The variables were assessed in the context of a larger survey with other variables that will not be discussed in the present paper.
2. An alternative SEM model wherein strength and affiliation were entered as independent variables

was also assessed. This model was a poor fit. The fit improved when strength was taken out of the model ( $\chi^2(3) = 6$ , CFI = .97, RMSEA = .09), but it still remained worse compared to the original model.

3. An alternative SEM model wherein strength and affiliation were entered as independent variables in the model was also assessed. This model was a very poor fit. When strength was taken out of the model, the fit was improved, but it remained a poor fit,  $\chi^2(4) = 37.11$ , CFI = .71, RMSEA = .25.

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### Biographical notes

MARIJA SPANOVIC is a graduate student in the Department of Psychology at the University of Southern California. Her research focuses on intergroup relations, aggression, and projection.

BRIAN LICKEL is an Associate Professor in the Department of Psychology at the University of Massachusetts Amherst. His research focuses on cognitive and affective processes underlying intergroup conflict and reconciliation.

THOMAS F. DENSON is a senior lecturer in the School of Psychology at the University of New South Wales. His research focuses on anger, aggression, intergroup relations, conflict, and social stress.

NEBOJSA PETROVIC is an Assistant Professor in the Faculty of Philosophy at the University of Belgrade. The main areas of his research include psychological aspects of social and political phenomena, particularly issues of authoritarianism, patriotism, peace-building and reconciliation after intractable intergroup conflict.