

RUNNING HEAD: Need for Cognitive Closure, Conservatism and Aggressiveness

Political Conservatism, Need for Cognitive Closure and Intergroup Hostility

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Abstract

Two studies examined the interaction of political conservatism and the need for cognitive closure in predicting aggressiveness in intergroup conflict and hostility toward out-groups. In the first study, Polish participants indicated their preference for coercive conflict strategies in the context of a real-life intergroup conflict. Only among participants who identify themselves as conservative, need for cognitive closure was positively and significantly related to preference for aggressive actions against the out-group. In the second study, the predicted interaction was investigated in the context of the terrorist threat in Poland. The findings indicated that high in need for closure conservatives showed greater hostility against Arabs and Muslims only when they believed that Poland was under threat of terrorist attacks inspired by Islamist fundamentalism.

Key words: Need for Cognitive Closure, Political Conservatism, Inter-group Hostility, Aggressiveness

Political conservatism serves a number of psychological needs (e.g. system justification or social dominance; Jost, Kruglanski, Glaser & Sulloway, 2003) and is more likely than any other set of political beliefs to satisfy the psychological need to avoid cognitively complex or ambiguous environments i.e. need for cognitive closure (Jost, et al, 2003; see also Chirumbolo, 2002; Golec, 2001, 2002a, 2002b; Jost, Kruglanski, & Simon, 1999; Kimmelmeier, 1997; Kossowska & Van Hiel, 2003). A conservative worldview contains a promise of a predictable social order with minimal complexity and minimal risk of change. It also seems to be associated with a biased understanding of inter-group relations that is likely to inspire preference for tough and hostile actions against out-groups in inter-group conflicts. For example, conservatives tend to see international powers as belligerent, dishonest and expansionist (Hurwitz & Peffley, 1990) and favor aggressive and hawkish ways of dealing with them, particularly when they are seen as immediate threats (Holsti, 1996; Wittkopf, 1990). There is also an established relationship between political conservatism and the tendency to use coercion in political life (Hurwitz & Peffley, 1990; Holsti, 1996, McCann, 2008). Thus, it is likely that conservatives who are motivated to adhere to behavioral prescriptions embedded in their worldviews may see no other option than fight and coercion in inter-group situations that are interpreted as conflictual or threatening the in-group.

Need for cognitive closure is defined as the motivation to quickly formulate and maintain a clear opinion on an issue, rather than accepting confusion and ambiguity (Kruglanski & Webster, 1996). It is related to a tendency to rely on ideological cues and group norms in inter-group behavior (e.g., Golec de Zavala, 2006; Ho-ying Fu et al., 2007). Furthermore, high need for closure is related to a decreased ability to understand inter-group situations in complex and multifaceted ways (De Dreu, Koole, & Oldersma, 1999; De Dreu, Koole, & Steinel, 2000; Webster, Richter, & Kruglanski, 1996). Limited cognitive perspective and simplistic perception are, in turn, related to preference for coercive actions in inter-group

conflicts (Pruitt & Carnevale, 1982; Deutsch, 1973; Golec, 2002b; Golec de Zavala, 2006; Sheriff, 1958; Suedfeld & Tetlock 1977; Winter, 2007). Thus, high need for closure predisposes people to see inter-group relations in a “black and white” way that encourages competition. The predisposition to compete can be strengthened by the tendency to adhere to behavioral prescriptions provided by salient worldviews also associated with the high need for closure.

It has been demonstrated that the relationship between high need for closure and inter-group aggressiveness is strengthened by the salience of competitive cultural conflict resolution styles (Ho-ying Fu et al., 2007), political extremism and hawkishness (Golec & Federico, 2004), nationalism (Federico, Golec & Dial, 2005) and salient, situational competitive cues (Golec de Zavala, Federico, Cislak & Sigger, 2008). Surprisingly, no studies have examined the role of conservative political orientation as a moderator of preferences for coercive actions in inter-group context among people motivated by a high need for closure (cf. Golec de Zavala, 2006).

Need for closure and conflict behavior

Need for cognitive closure is related to negative inter-group attitudes and preference for belligerent inter-group actions. People high in need for closure tend to favor the in-group and disfavor out-groups (Shah, Kruglanski, Thompson, 1998). Negotiators high in the need for closure engage in less systematic information processing that results in greater competitiveness towards opponents stereotyped as competitive (De Dreu, Koole, Oldersma, 1999). In inter-group conflicts, people high in need for closure tend to choose actions that escalate, rather than appease the conflict, especially when salient ideologies or group norms prescribe aggressive behaviors towards out-groups (Federico, Golec & Dial, 2005; Golec de Zavala, 2006; Golec & Federico, 2004; Golec de Zavala et al., 2008).

People high in need for closure tend to adhere to group norms regulating inter-group behavior (Golec & Federico, 2004; Ho-ying Fu, et al., 2007; Kruglanski, Pierro, Mannetti, & De Grada, 2006). Thus, high need for cognitive closure is related to inter-group aggressiveness when salient ideologies or cues indicate that aggression is most desirable behavior. However, high need for closure is unrelated to coercion when group norms or beliefs prescribe cooperation or simply do not support aggression (Golec de Zavala, 2006; Ho-ying Fu, et al., 2007) or when cooperation is primed by situational cues (Golec de Zavala, et al., 2008). Thus, the relationship between need for closure and inter-group aggressiveness depends on what ideological context is salient and available. In present studies we examine how this relationship is moderated by the political ideology people high in need for closure often opt for i.e. political conservatism.

Political conservatism and cognitive uncertainty

Although, what is understood as conservative differs across time, the geographic locations and socio-political contexts, the function of conservative worldview seems to remain the same: opposition to social change and preference for social hierarchy (Jost, et al., 2003). Thus, we treat as conservative these political opinions and policies that at given time and at given place represent the attempt to preserve traditional social and economic arrangements (see for example Asher, 1980, for differentiation between social and economic dimensions of political conservatism; see Boski, 1993, for a suggestion that these two dimensions are orthogonal and Golec, 2002c, for data suggesting that they are negatively correlated in the Polish political context; see Golec de Zavala & van Bergh, 2007; Jost et al 2003a for discussion on how different economic arrangements can be seen as conservative in the preserving status quo sense). Regardless of its particular content, the conservative worldview seems to provide epistemic protection from cognitive uncertainty and personal and social threat (Jost , Napier, Thorisdottir, Gosling, Palfai, Ostafin, 2007). A recent study

demonstrated that worldviews that define values as absolute rather than relative and truth as definite rather than approximate (e.g traditionalist but also modernist worldview) attract people motivated to avoid cognitive uncertainty (Golec de Zavala & van Bergh, 2007).

A seminal review by Jost and colleagues (2003), demonstrates a remarkably reliable (although moderate in size), positive relationship between the high need for cognitive closure (and associated variables such as intolerance of ambiguity, uncertainty avoidance and low cognitive complexity) and support for core conservative political beliefs (Jost et al. 2003). Studies show that higher level of need for closure is associated with conservative political attitudes (Chirumbolo, Areni, Sensales, 2004; Van Hiel, Pandelaere, Duriez, 2004), capitalist economic arrangements in Western European context and socialist arrangements in post-communist countries (Golec, 2002a; Kossowska & van Hiel, 2003), right-wing party identification (Kimmelmeier, 1997), favorable attitude toward death penalty (Jost, Kruglanski & Simon, 1999), stronger anti-immigrant and nationalistic attitudes (Chirumbolo et al., 2004) and general punitiveness (Sargent, 2004). These relationships are found among ordinary citizens as well as political elites (Kimmelmeier, 2007; for a discussion of differential association of social and economic dimensions of political conservatism as a function of political involvement in Poland see Golec, 2002a). Thus, a conservative worldview is likely to be chronically salient for individuals high in need for closure and they may use it to guide their actions in inter-group situations. Importantly, high need for closure pertains to individual cognitive-motivational functioning, the way people deal with new and complex information, and it is theoretically and statistically distinguished from political conservatism that concerns endorsement of particular values and social and economic arrangements (Jost et al, 2003; Kruglanski & Webster, 1996).

Political conservatism and inter-group behavior

As mentioned above, conservative worldview contains quite clear prescriptions for desirable ways of dealing with inter-group situations such as inter-group conflict and intergroup threat. There is substantial empirical evidence indicating the relationship between political conservatism and preference for out-group coercion and aggression (Hurwitz, Peffley, 1990; Holsti, 1996; Wittkopf, 1990). Conservatives tend to endorse a “militant internationalist” approach to foreign affairs, which favors the aggressive use of military force to achieve desired foreign policy goals while rejecting a “cooperative internationalist” approach. This in turn emphasizes collaborative, multilateral engagement with other nations and with an international organization in the resolution of international disputes and problems (see Holsti, 1996).

In addition, conservatives seem to become more aggressive when they feel threatened either personally or as group members. Conservatives confronted with their own mortality become more intolerant toward those who threaten their worldview (Greenberg, Simon, Solomon, Chatel, Pyszczynski, 1992), tend to derogate out-group members (Arndt, Greenberg, 1999) and support military actions that could lead to death of thousands of civilians (Pyszczynski, Abdollahi, Solomon, Greenberg, Cohen, Weise, 2006). Conservative Israelis who opposed the Israeli pullout plan from Gaza Strip become more acceptant of violent and aggressive actions in opposition to this plan in mortality salience conditions (Hirschberg & Ein-Dor, 2006). Among the 9/11 survivors, the conservative shift in political views was associated with increased support for militarism, and for the US taking military actions in Afghanistan (Bonanno & Jost, 2006). Political conservatism under threat is also related to the preference for punitiveness towards those who threaten existing social order (McCann, 2008).

This evidence suggests that the conservative worldview is associated with preference for aggressive ways of dealing with threatening social groups. We argue, that in inter-group

conflicts and in the context of perceived intergroup threat, political conservatism supplies guidance and justification for the competitive and hostile actions and hostile attitudes against the threatening out-groups. Liberal worldview, on the other hand, is less likely to provide ready made behavioral prescriptions. Liberals are more responsive to unique, altering aspects of social situations (e.g Amodio, Jost, Master, Yee, 2007). They are also less likely to choose one-sided and hostile inter-group actions. Previous studies show that people who endorse liberal worldview tend to be more egalitarian, less punitive, less willing to fight a war than people who identify with conservative worldview (Basabe & Valencia, 2007). Thus, chronically accessible conservative worldview that provides clear cues for aggressive behavior in intergroup conflicts is likely to strengthen the relationship between high need for closure and aggressiveness while accessibility of liberal worldview that does not encourage ready-made solution for all conflictual situations is not likely to enhance it.

We assume that the relationship between the need for closure and aggressiveness and out-group hostility will be positive and significant only among people who describe themselves as conservative but not among those who identify themselves as liberal. We examine this assumption in the context of an explicit inter-group conflict (the Polish-German conflict in study 1) and an ambiguous intergroup conflict (the War on Terrorism context subjectively perceived as threatening the in-group in study 2). In both studies, we look at political conservatism (vs liberalism) as a general political stance, a symbolic identification with a worldview that cherishes and protects traditional values and arrangements (vs the worldview that promotes relativity and change). Therefore, we measure political conservatism by participants' self-categorization rather than by support for particular policies or positions on political issues. The Liberal-Conservative Self Placement Scale is suggested to entangle social and economic dimension of political conservatism as well as authoritarianism (Stenner, 2005). However, disentangling these three aspects of political conservatism is not considered

in the present studies as self-categorization as politically conservative is treated broadly as a statement of group consciousness and loyalty (e.g. Conover & Feldman, 1981). It is assumed that the group shares a common worldview and endorses similar social norms and values that can guide behavior in social situations such as intergroup conflict.

STUDY 1

In study 1 we test the hypothesis that the relationship between need for cognitive closure and aggressiveness in the inter-group conflict is moderated by support for conservative worldview. It is predicted that people high in need for closure will prefer aggressive actions in conflict only when they define their political outlook as conservative. We examine the relationships in the context of the international conflict between Poland and Germany. This conflict was salient when the study was conducted.

Method

Participants. The respondents were 120 Polish, undergraduate students from Southern Poland. (92 women, 25 men, 3 failed to indicate their gender). Participants were ranging in age from 20 to 44 years old ($M = 25$; $SD = 4.95$).

Procedure. Study 1 was conducted during the actual tensions in Polish-German relationship concerning the German proposition to erect in Poland a memorial for German exiles from Poland after World War II. Participants were first asked to complete the Need for Cognitive Closure Scale and describe their political orientation using the Liberal-Conservative Self Placement Scale. Next, they were asked to read a short account of the conflict between Poland and Germany (described below). The participants were then asked to imagine that they were in the position to make decisions about their in-group's (Poland) actions in this conflict. They were presented with a list of different strategies of action and asked to indicate how likely it was that they would choose each of the strategies in order to deal with their opponents (Germans) in this conflict. The list consisted of 16 strategies. They

were based on clusters of conflict strategies which emerged during content-analytic validation studies. They can be grouped in 3 broader categories which represent coercive, cooperative and mediation approaches to intergroup conflict (Golec & Federico, 2004). In this study we were primarily interested in factors predicting the choice of coercive actions in conflict therefore only 8 items representing preference for aggressive actions toward the Germans were used in further analyses¹.

Conflict. As a result of agreements reached at the Yalta and Potsdam Conferences near the end of WWII, lands that had formerly belonged to the eastern region of pre-war Germany became part of Poland. Germans living in these regions were forced to move west. Representatives of these exiles and their descendants proposed to build a monument in Poland commemorating the victims of this settlement action. However, many Poles were displeased with the idea of Germans being commemorated as victims of WWII. The discontentment is based on the fact that Germany was the nation that started the war by invading Poland on September 1, 1939. Polish government responded with a call for stronger efforts to enforce German payment of long-overdue war reparations to Poland. Germans, on the other hand, called for the return of German lands and indemnification against WWII-era Polish compensation claims.

Measurements.

Need for Cognitive Closure. This variable was measured using a Polish version of the 42-item Need for Closure Scale successfully used in earlier studies (Webster & Kruglanski, 1994; Golec, 2001; Golec & Federico, 2004) ($\alpha=.82$; $M = 3.54$; $SD = .42$). Participants responded using a scale from '1' – '*strongly disagree*' to '6' – '*strongly agree*'. Higher scores indicate higher levels of need for cognitive closure.

Liberal – Conservative Self-Placement Scale. This scale was used in order to assess participants' self-reported political orientation. Participants were asked to indicate on a 7-

point Likert-type scale whether they considered themselves politically liberal or conservative (“1” = “*definitely liberal*” to “7” = “*definitely conservative*”) ($M = 2.77$; $SD = .82$).

Aggressive actions in conflict. Respondents were asked to read the description of the Polish-German conflict. Afterwards they were asked to indicate on the 7-point Likert scales how likely it was that they would choose each of 8 coercive actions in order to deal with their opponents in this conflict (‘1’ – ‘*highly unlikely*’ to ‘7’ – ‘*highly likely*’). The strategies included (1) “*use of fraud and deception*”; (2) “*spread negative information about the opponent*”; (3) “*reject all of proposals*”; (4) “*act as if you are never giving in*”; (5) “*criticize*”; (6) “*demonstrate your strength in order to intimidate*”; (7) “*humiliate and disregard*” and (8) “*openly attack*” (Golec de Zavala, 2005; Golec & Federico, 2004). Higher scores indicate higher levels of acceptance of coercive strategies in intergroup conflict ($\alpha = .83$; $M = 2.28$; $SD = .99$).

Results

The correlational analyses reveal that need for cognitive closure is positively associated with preference for aggressive actions in intergroup conflict. This correlation is marginally significant ($p = .06$). Support for conservative worldview is positively associated with preference for aggressive intergroup actions and this relationship is statistically significant (Table 1). INSERT TABLE 1 HERE

The relationship between need for closure and aggressiveness among political conservatives.

In order to test our main hypothesis postulating the interaction of need for closure and political conservatism in predicting intergroup aggressiveness we performed the hierarchical multiple regression analysis with preference for aggressive actions in the Polish – German conflict as the dependent variable. As suggested by Aiken and West (1991) the predictor variables were standardized before computing the interaction term. Need for cognitive closure

and political self-placement were entered as a block in Step 1. The interaction term was entered in Step 2. This analysis allowed us to examine the direct relationships between political ideology and need for cognitive closure with preference for aggressive responses in the conflict and assess their interactive effects over and above the direct associations.

The results indicate that participants' identification with conservative ideology is positively related to preference for aggressive actions ($b = .33$; $p < .01$). Need for closure failed to predict preference for aggression ($b = .13$; $p = .23$). In Step 2 the results showed a significant positive relationship between aggressiveness and political self-placement ($b = .28$; $p < .01$) and marginally significant positive relationship of intergroup aggressiveness with need for cognitive closure ($b = .18$; $p = .10$). These effects were qualified by a significant interaction of need for closure and political ideology ($b = .29$; $p < .05$). The addition of the interaction term in Step 2 lead to a significant increase in the amount of variance explained by the model ($\Delta R^2 = .05$, $p < .05$). The analyses that controlled for participants' age, gender and level of education revealed the same pattern of results (see Table 2).

INSERT TABLE 2 HERE

The significant interaction was probed using the procedure proposed by Aiken & West (1991). We used one standard deviation below and above the mean score on the Liberal-Conservative Self-Placement Scale to plot the equations and to test the significance level of each simple slope. As depicted in Figure 1, there was a significant relationship between need for closure and preference for aggressive actions in conflict among people who self-identify as conservative ($b = .47$; $SE = .12$; $p < .007$), but not among those who define their political orientation as liberal ($b = -.11$; $SE = .12$; $p = .45$).

INSERT FIGURE 1 HERE

DISCUSSION OF STUDY 1

The results of Study 1 confirm the moderating role of political conservatism on the relationship between need for cognitive closure and aggressiveness in the inter-group conflict. Need for cognitive closure is related to preference for aggressive actions against the out-group in the conflict only among people who identify their political outlook as conservative rather than liberal. These relationships were examined in the context of an ongoing international conflict between Poland and Germany and it was assumed that participants were well aware of the political tensions between the two countries.

The present results corroborate findings of earlier studies that investigated the relationship between need for closure and aggressiveness in open and explicit inter-group conflicts (e.g. Golec & Federico, 2004). However, study 1 and the previous studies fail to answer the question whether high need for closure strengthened by salient competitive prescriptions predisposes people to see most of the inter-group situations as conflictual and respond aggressively or it predisposes people to prefer aggressive responses after the situation has been already defined as a conflict. There is some evidence that conservative worldview (more than liberal worldview) may be related to increased sensitivity to intergroup threat. Generally, conservatives tend to think in terms of their group loyalties, and value their social identities. For example, political conservatism is related to national group attachment (Adorno et al, 1950; Karasawa, 2002; Starnawski, 2003) and a tendency to endorse communal values and belong to social groups and organizations (Skarzynska & Gientka, 1999). Authoritarianism (related to conservatism) is related to collectivism (Kimmelmeier, et al, 2003) and is an opposition of individualism (Gelfand, Triandis, Chan, 1996). Thus, conservatives seem to perceive world in terms of social divisions and they may be more likely than liberals to perceive intergroup threat in ambiguous situations.

Need for cognitive closure and conservative worldview may predispose people to interpret ambiguous inter group situations as conflicts, act aggressively and in fact turn them

into open conflicts. Alternatively, the need to act upon the behavioral prescriptions embedded in the salient worldview may be activated after the situation has been already defined as intergroup threat and/or conflict. In the first case, the results of study 1 should be replicated in the context of an ambiguous, not obviously conflictual intergroup situation. In the second case the interaction between high need for closure and conservatism should be significant only among people who perceive this situation as the intergroup threat. In this case, we may expect a three way interaction of need for closure, political ideology and perception of intergroup threat in predicting out-group negativity. . Thus, the tendency to see inter group situations as conflictual may moderate the relationship between need for closure, conservatism and aggressiveness.

STUDY 2

Study 2 investigates the relationships between need for cognitive closure, political conservatism and hostility in the context of an inter-group situation which can be, but does not have to be, perceived as threatening to the in-group. A possible terrorist threat to Poland and Polish citizens provided the context of Study 2. Polish participants were reminded of terrorist attacks in the US, UK and Spain. It was emphasized that despite its involvement in the War on Terrorism following the 9/11 attacks, Poland did not suffer from terrorist attacks. Participants were asked how much they fear that their nation is in danger of attacks from terrorist organizations inspired by Islamist fundamentalism and then to indicate their attitudes and preferred reactions towards Arabs and Muslims.

Poles vary in their perceptions of the possibility of terrorist attacks in Poland and in the level of threat of such attacks. In early 2006, when the study was conducted, the opinion polls revealed that about 61% of Poles believed that Poland may be targeted by terrorist organizations because of Polish involvement in Iraq and Afghanistan, while 29% of Polish respondents believed that there would not be a terrorist threat to Poland (CBOS, 2007). We

assumed that those participants who feared that their country could be attacked were more likely to perceive the situation in terms of an inter-group conflict (Poland vs countries supporting terrorism).

Method

Participants. Participants were 187 Polish, undergraduate students from Northern Poland with age ranged from 19 to 35 years ($M = 23$; $SD = 2$). Sixteen male and 171 female individuals took part in the study and were asked to fill in the questionnaire in exchange to the research participation credit.

Measurements.

Need for Cognitive Closure. This variable was measured using the Polish version of the Need for Closure Scale as in study 1 ($\alpha = .73$; $M = 3.60$; $SD = .39$).

Political Self-placement Scale. To assess self-ascribed political affiliation, participants were asked to place themselves on a 7-point Likert scale where '1' was defined as '*definitely liberal*' and '7' was defined as '*definitely conservative*'. ($M = 3.41$; $SD = 1.31$).

Fear of terrorist attacks against Poland. In this study participants were asked to respond to a question "*How much are you afraid terrorist attack in Poland?*" on a scale from '1' – '*Not at all*' to '7' – '*Very much*'. ($M = 3.61$; $SD = 1.75$).

Anti-Arab and anti Muslim hostility. This index was based on four items that allegedly reflected opinions of other university students. Participants were asked to express their support for following statements "*Student C thinks that the 'War on Terrorism' should be transformed into a war against the Arab culture because it is a source of intolerance, violence and hostility against Western values*", "*Student D thinks that European culture is superior to all other cultures*", "*Student I considers Islamic culture as being equal in value to Western culture and equally respectful*" (reversely coded) and "*Student J thinks that the wars on Afghanistan and war on Iraq were the best way to deter terrorists and show who is more*

powerful” ($\alpha=.74$; $M = 2.43$; $SD = 1.08$). Participants were asked to indicate how much they support each opinion using scale from ‘1’- ‘*Strongly disagree*’ to ‘7’ – ‘*Strongly agree*’.

Results

The correlational analyses reveal that both political conservatism and high need for closure are positively related to the perception of intergroup threat and to hostility against Muslims and Arabs (Table 3).

INSERT TABLE 3 HERE

The relationship between need for closure, political conservatism and out-group hostility as a function of perceived intergroup threat

We tested the hypothesis that among those participants who fear the terrorist attacks in Poland the chronic accessibility of conservative worldview moderates the relationship between high need for closure and out-group hostility. In order to test this hypothesis we used a hierarchical multiple regression analysis on standardized predictors with the anti-Arab hostility as the dependent variable (Aiken & West, 1991). Threat to the in-group, need for cognitive closure and political self-placement were entered as predictors in Step 1, three two-way interactions (need for closure x political self-placement; need for closure x threat; threat x political self-placement) were entered as a block in Step 2, and the three-way interaction term of all the main predictors was entered in Step 3 (Table 4).

INSERT TABLE 4 HERE

Results indicate that perceived terrorist threat to Poland ($b = .27$; $p < .001$) and respondent’s political self-placement ($b = .18$; $p < .05$) are positively and significantly related to Anti-Arab hostility ($R^2 = .12$, $p < .001$). However, need for closure failed to directly predict out-group hostility ($b = .05$; $p = .49$). The addition of two-way interactions in Step 2 did not significantly increased the amount of explained variance ($\Delta R^2 = .01$, $p = .42$). None of the two-way interactions was significant, (respectively $b = .15$, $p = .1$; $b = -.01$, $p = .88$; $b = -$

.01, $p = .85$). However, the regression coefficient for the three-way interaction between perceived threat, political self-placement, and need for closure introduced in Step 3 proved to be significant ($b = .17$; $p < .05$). The addition of the three way interaction in Step 3 lead to the significant increase in the amount of variance explained by the model over and above first-order effects, even though according to Cohen (1992) the effect was small ($\Delta R^2 = .02$, $p < .05$). Cohen, Cohen, West and Aiken (2003) indicate, however, that effect sizes for interactions in social science research tend to be similar as found in our studies. The analyses that controlled for participants' age, gender, level of education and individual religiosity revealed the same pattern of results.

In order to aid interpretation of this three-way interaction we followed the procedure proposed by Cohen et al. (2003), who suggest breaking down the interaction into more interpretable form by testing the interaction of two factors (political self-placement and need for cognitive closure) at different levels of the third factor (perceived threat).

We first tested the two way interaction of political self-placement and need for closure among those who perceived low intergroup threat (one standard deviation below the mean of perceived intergroup threat). We found no significant simple interaction among participants who perceived little threat of terrorist attacks to Poland. The estimated simple slope for liberals ($b = .07$; $SE = .12$; $p = .60$) was not significantly different from that for conservatives ($b = -.02$; $SE = .18$; $p = .90$). The need for closure x political worldview interaction was further analyzed using the procedure suggested by Aiken and West (1991). There was no significant association between out-group hostility and need for closure either for conservatives or liberals, as illustrated on Panel A in Figure 2.

Next, we tested the simple interaction of political ideology and need for closure among those who perceive high intergroup threat. The two way interaction of need for closure and political self-placement was significant ($p < .05$). The estimated simple slope for liberals ($b =$

-.28; $SE = .16$; ($b = -.28$; $p = .12$) was significantly different from that for conservatives ($b = .36$; $SE = .15$; $p < .05$). The simple slope was significant for conservatives, but not for liberals as illustrated on Panel B in Figure 2. To sum it up, only among those participants who believed that there is the terrorist threat to Poland and Poles the high need for closure in interaction with political conservatism predicted anti-Arab hostility.

INSERT FIGURE 2 HERE

DISCUSSION OF STUDY 2

In Study 2 we replicated and extended the findings of study 1 in a significant way. The results confirm the moderating role of political orientation for the relationship between need for closure and out-group negativity. Need for closure was related to out-group hostility among participants who identified themselves as conservative. Most importantly, this interaction was significant only among those participants who perceived the terrorist threat to their in-group. Only those high in need for closure conservatives who believed that Poland is threatened by terrorism inspired by fundamentalist interpretation of Islam expressed Western ethnocentrism and hostile attitudes towards Muslims and Arabs. In other words, in an inter-group situation that is not clearly defined as inter-group conflict, need for closure and political conservatism are related to out-group negativity only among those participants who tend to perceive this situation as threatening and conflictual.

GENERAL DISCUSSION

The results of the present studies indicate that conservative political outlook inspires coercive and aggressive behavior but only when the inter-group situation is portrayed or perceived as threat to the in-group or an intergroup conflict. This effect is also restricted to people who are motivated to avoid cognitive uncertainty and are likely to use ideological cues to guide their intergroup actions. The results confirm also that the need for cognitive closure is an important predictor of intergroup behavior but its relationship with intergroup

aggressiveness and out-group negativity is complex rather than straightforward (see also Chirumbolo, et al, 2004; Golec de Zavala, 2006; Golec & Federico, 2004; Golec de Zavala et al, 2008; Ho-ying Fu, et al., 2007; Shah et al, 1998). Competitive cues embedded in the chronically salient conservative worldview strengthen the relationship between high need for closure and hostility in the intergroup context. Among self-defined liberals, the relationship between high need for closure and intergroup aggressiveness is not significant.

It has been suggested that people high in need for closure choose coercive actions in intergroup conflict because they favor simple and final solutions to complex situations. Within a limited cognitive perspective, aggression and coercion bring an illusion of simplicity and finality because they aim at permanently silencing the opponent (Golec & Federico, 2004). High need for closure also motivates people to protect their in-groups since social groups are important providers of epistemic certainty (Kruglanski et al, 2006). However, people high in need for closure report preference for aggressive actions only when the ideological cues (e.g. shared beliefs, norms and worldviews) suggest aggression as the most proper and desirable way of dealing with intergroup threat and conflict. The present studies show that political conservatism is a source of competitive cues people high in need for closure are likely to follow in intergroup conflict and under intergroup threat.

Furthermore, our findings suggest that conservative worldview contains a confrontational ‘conflict schema’ (Bar-Tal, Kruglanski & Klar, 1993; see also Federico, Golec & Dial, 2005; Golec & Federico, 2004) that suggests aggression and coercion as proper reactions as soon as a social situation is defined as intergroup threat. On the other hand, liberal political outlook may be related to a cooperative conflict schema. As mentioned above, a liberal worldview is related to egalitarianism, support for civic rights and liberties and rejection of war (Basabe & Valencia, 2007; McFarland & Mathews, 2005). However, it may also be likely that whereas political conservatism contains clear, general prescriptions for

actions in intergroup conflicts, liberal worldview is related to greater responsiveness to situational particularities and lesser tendency to rely on 'ready made' solutions to all conflict situations. Conservatives tend to have rigid and persistent cognitive style (Crowson, 2008; Jost et al., 2003) and rely on cognitive heuristics such as conflict schemas in order to understand and choose behavior in all situations classified as conflicts. On the other hand, liberals are more responsive to altering aspects of situations and less likely to have one dominant conflict schema (e.g Amodio et al., 2007). In other words, liberals may be more likely than conservatives to analyze all inter-group conflicts in a 'bottom up' mode rather than to apply a conflict schema to each particular conflict situation in a 'top down' mode. Thus, it may be sufficient that liberals do not have a crystallized opinion on how to act in conflicts or they are chronically suspicious towards one best way of seeing social situations to diminish the relationship between high need for closure and aggressiveness those who support liberal worldview.

Importantly, the present studies indicate that people have to define the inter-group situation as conflictual and threatening to the in-group for the interactive effect of high need for closure and political conservatism on inter-group aggressiveness to appear. In Study 1 participants were reminded about a real, and salient in the time the study was conducted, inter-group conflict. The results of this study reveal that conservatives high in need for closure tend to choose aggressive and coercive strategies in order to deal with their opponents in this conflict. In study 2, we presented participants with a situation that may be, but does not have to be defined as conflictual. We asked how they themselves feel about this situation. We asked to what extent they feel Poland may be targeted by terrorist organizations.

Terrorist threat does not have to be perceived as an element of an intergroup situation. It may be seen as an unpredictable, natural disaster (Sinclair, LoCicero, 2006). In addition, even if Polish participants saw the War on Terror as an intergroup situation, they would not

have to see it as a conflict that involves and directly threatens their national in-group. Poland has never suffered from terrorist attacks or serious terrorist threat and Poles differ in their assessment of the degree of terrorist threat to Poland. The results of Study 2 reveal that only among Polish participants who perceived a realistic terrorist threat to Poland, the interaction of high need for closure and political conservatism predicted the support for transforming the War of Terrorism into a war against the whole Arab world and the belief that war is the way of dealing with Islamic culture that is essentially inferior to Western culture. Thus, high need for closure and political conservatism increase out-group hostility in response to in-group threat. The three factors - cognitive rigidity, political conservatism and perceived intergroup threat - have to be present to predict preference for inter-group aggression.

The present results reveal a coherent pattern of relationships between need for closure, political conservatism and inter-group aggressiveness. We would like to acknowledge that the mechanism that we suggest in our analyses is causal. However, the correlational nature of our data does not allow us to draw firm conclusions about the causal relationships. We assumed that need for cognitive closure in interaction with political conservatism predicts out-group negativity. In order to support our assumption we turned to the research in social sciences that confirms the direction of causality assumed in the proposed model. Numerous studies suggest that basic cognitive and motivational predispositions and broader ideological orientations constrain specific attitudes, such as out-group negativity (rather than vice versa; e.g. Cohrs, Moschner, Maes, & Kielmann, 2005; Duckitt, 2006; Duckitt & Sibley, 2006; Feshbach, 1994; de Figueiredo & Elkins, 2003; Sidanius, Feshbach, Levin & Pratto, 1997). Nevertheless, future research should investigate these relationships in a series of experimental designs.

In addition, future studies should attempt to better understand the role that right wing authoritarianism - the convergence of (1) submissiveness to established and legitimate social authorities; (2) adherence to social conventions that are endorsed by society and its

authorities, and (3) aggressiveness against those who question or endanger social order and those indicated by authorities (e.g. Altemeyer, 1998) - may play in the complex relationships between cognitive-motivational predispositions, ideological cues and intergroup behavior. Authoritarianism did not affect the interactive effect of need for closure and salient ideological cues on intergroup behavior or out-group attitudes in any of our earlier studies (Federico, Golec & Dial, 2005; Golec & Federico, 2004; Golec de Zavala et al, 2008). This variable is, however, related to need for closure (Webster & Kruglanski, 1996), political conservatism (e.g. Jost et al, 2003) and sensitivity to intergroup threat (e.g. Duckitt & Fisher, 2003).

Another caveat of the present study is the fact that both studies used convenience samples comprised of students. This might limit generalizability of our findings (see Sears, 1986). However, we suppose that among different samples, especially those to whom political cues are chronically salient (like politicians), the relationship we describe would only be more pronounced, and that in general political sophistication and involvement of political elites (e.g. greater exposure to and understanding of political ideology) would strengthen the relationships between cognitive functioning, political conservatism, and hostility toward out-groups.

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Endnotes

1. In the preliminary analyses we looked at correlations of cooperative, coercive and meditation strategies with political conservatism and need for cognitive closure. Only the preference for coercive actions was significantly (positively) related to need for closure (marginally significant) and conservatism. There were no significant intercorrelations between the three types of conflict actions. Regression analyses using cooperative and meditation actions as dependent variables and need for closure, political conservatism and their interaction as predictors rendered no significant results and are not presented here (for the full list of strategies see Golec & Federico, 2004).

Table 1

Intercorrelations between need for closure, political conservatism and preferences for aggressive conflict actions: Study 1 (N = 120)

	Political conservatism	Need for closure
Political conservatism	--	
Need for closure	.22*	
Aggressive actions	.30**	.17+

* Correlation is significant at the .05 level (2-tailed).

** Correlation is significant at the .01 level (2-tailed).

Table 2

Interactive effects of the need for closure and political conservatism on the preference for aggressive actions: study 1 (N = 120)

Variable	B	SE B	β
Step 1			
Need for closure	.17	.12	.11
Political conservatism	.33	.11	.29**
Step 2			
Need for closure	.18	.11	.18+
Political conservatism	.28	.11	.25**
Need for closure x Political conservatism	.29	.11	.23*

Note. N = 187 $R^2 = .11, p < .01$ for Step 1; $\Delta R^2 = .05, p < .05$ for Step 2.

+ $p > .1$; * $p < .05$; ** $p < .01$

Table 3

Inter-correlations between need for closure, political conservatism, perceived intergroup threat and out-group hostility: Study 2 (N = 187).

	1	2	3
1. Political conservatism	--		
2. Need for closure	.24**		
3. Perceived threat	.21**	.28***	
4. Out-group hostility	.23**	.16*	.30***

*** Correlation is significant at the .001 level.

** Correlation is significant at the .01 level.

* Correlation is significant at the .05 level

Table 4

Interactive effects of perceived intergroup threat, need for closure and political conservatism on out-group hostility: Study 2 (N = 187)

Variable	B	SE B	β
Step 1			
Perceived threat	.27	.08	.25**
Need for closure	.06	.08	.05
Political conservatism	.18	.08	.17*
Step 2			
Perceived threat	.28	.08	
Need for closure	.07	.08	.26**
Political conservatism	.17	.08	.07
Need for closure x Political conservatism	.15	.09	.16*
Need for closure x Perceived threat	.01	.08	.13
Perceived threat x Political conservatism	.01	.07	-.01
			-.01
Step 3			
Perceived threat	.26	.08	
Need for closure	.03	.08	.24**
Political conservatism	.14	.08	.03
Need for closure x Political conservatism	.14	.09	.13+

Need for closure x Perceived threat	-	.08	.11
Perceived threat x Political conservatism	.04	.07	-.03
	.01		.01
Need for closure x Perceived threat x Political conservatism	.18	.08	.17*

Note. N = 187 $R^2 = .12, p < .001$ for Step 1; $\Delta R^2 = .01, p = .42$ for Step 2; $\Delta R^2 = .02, p < .05$ for Step 3.

+ $p > .1$; * $p < .05$; ** $p < .01$

Figure Captions

Figure 1: Interaction effect of need for closure and political conservativeness on preference aggressive actions in intergroup conflict: Study 1 ($N = 120$).

Note. ** $p < .01$

Figure 2: Interactive effects of perceived threat, need for closure and political conservatism on out-group hostility: Study 2 ($N = 187$).

Note. * $p < .05$

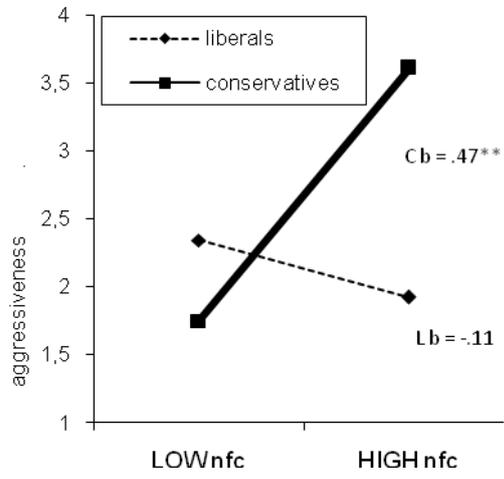


Figure 1.

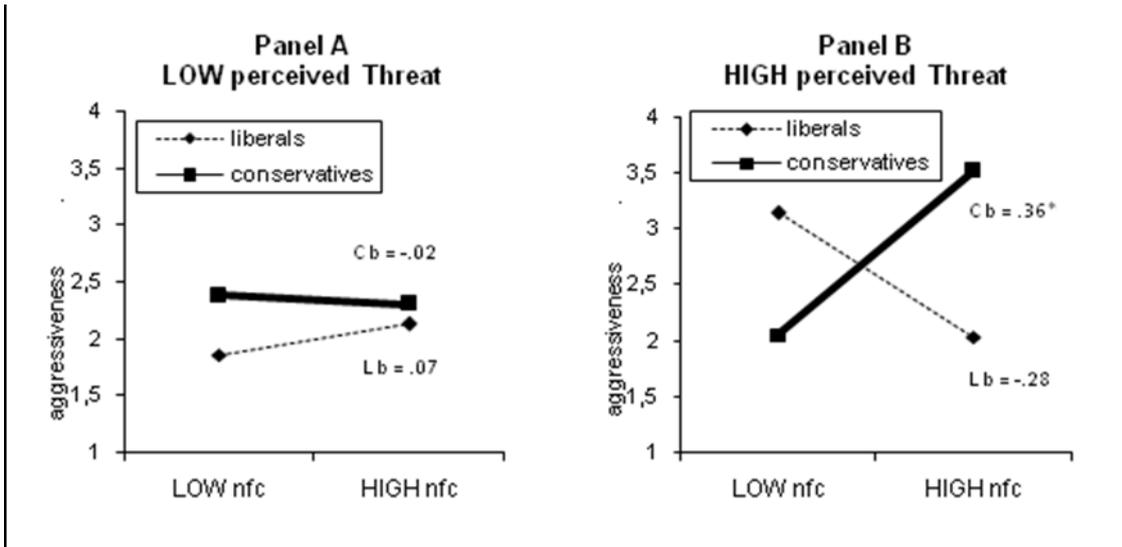


Figure 2.