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Can ingroup affirmation relieve outgroup derogation?

Ian McGregor*, Reeshma Haji, So-Jin Kang

Department of Psychology, York University, 4700 Keele Street, Toronto, Ont., Canada M3J 1P3

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ABSTRACT

Intergroup hostilities are an important social concern in multicultural societies and the global community. Individuals with dispositionally high Personal Need for Structure (PNS) are particularly inclined toward outgroup derogation [Schaller, M., Boyd, C., Yohannes, J., O'Brien, M. (1995). The prejudiced personality revisited: Personal need for structure and formation of erroneous group stereotypes. *Journal of Personality and Social Psychology*, 68, 544–555]. The present research demonstrates that ingroup affirmation can eliminate high PNS individuals' tendency toward outgroup derogation. Spontaneous (Study 1) and experimentally manipulated affirmations (Study 2) of consensual, positive ingroups eliminated the high PNS tendency to derogate outgroup targets. Study 3 experimentally manipulated the two key elements that are presumably bolstered by ingroup affirmations—self-certainty and self-worth—independent of the group context. The high PNS tendency to derogate outgroups was relieved only in the combined certainty and worth affirmation condition, just as it had been relieved in Study 2 by the ingroup affirmation. Results suggest a paradoxical strategy for relieving derogation of outgroups by affirming ingroups.

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"It is hereby declared to be the policy of the Government of Canada...to foster the recognition and appreciation of the diverse cultures of Canadian society and promote the reflection and the evolving expressions of those cultures" (Department of Canadian Heritage, 1988).

In the 1980s, countries such as Canada, Britain, and Australia, began to adopt multiculturalism programs to encourage preservation and promotion of immigrant groups' cultural identifications. It was hoped that affirmed groups would be more inclined than threatened groups to respect other groups' differences. There has been recent political controversy over the fruits of such multiculturalism initiatives (e.g., *The Economist*, 2007). Popular commentators point to instances in which immigrant groups have turned their backs on their host country to live in exclusive traditional enclaves. In recent, high profile cases, immigrant enclaves have even seemingly fostered antisocial hostility against the host culture. These few examples have aroused a backlash against multiculturalism programs, and precipitated demands for immigrants to assimilate to the host cultural norms. The present research examines a core assumption of multiculturalism programs. We investigate whether ingroup affirmations can quell outgroup derogation among those most inclined toward outgroup derogation.

Threat, Personal Need for Structure (PNS), and outgroup derogation

The Personal Need for Structure scale measures desire for simply structured forms of social cognition. People with high PNS scores (or high scores on the closely related Need for Closure scale) are inclined toward prejudice and outgroup derogation (Kruglanski, Shah, Pierro, & Mannetti, 2002; Moskowitz, 1993; Neuberg & Newsom, 1993; Shah, Kruglanski, & Thompson, 1998). High PNS individuals rely on simplistic social categorizations (Schaller, Boyd, Yohannes, & O'Brien, 1995) which are less constrained by evidence when judging unfamiliar outgroups as compared to familiar ingroups. The high PNS tendency to simplify and derogate outgroup evaluations may also be motivated by a desire to preserve shared reality and to discredit perceived threat from the rival social meanings that outgroups represent (Heine, Proulx, & Vohs, 2006; Jost, Glaser, Kruglanski, & Sulloway, 2003; Hardin & Higgins, 1996; Hogg, 2007). Indeed, the motivational basis for high PNS individuals' closed-mindedness is revealed by their particularly heightened tendency to cleave to stable, shared social meanings and to abhor ambiguity when threatened. For example, after being reminded of their own mortality they become particularly derogatory towards social deviants and drawn to interpersonal balance, consensus, and exaggerated belief in a just world—they even become more derogatory toward abstract art, presumably because of the ambiguous social meanings that such art represents (Landau, Greenberg, Solomon, Pyszczynski, & Martens, 2006).

* Corresponding author. Fax: +1 416 736 5814.
E-mail address: ianmc@yorku.ca (I. McGregor).

Ingroups as affirmational resources

Since Durkheim's seminal treatise on anomie and suicide (Durkheim, 1951), diverse theorists have noted that the psychological viability of the self depends on groups. One reason may be that the social consensus inherent in stable ingroup norms powerfully bolsters self-certainty and thereby relieves dissonance and uncertainty (Festinger, 1950, 1957; Hardin & Higgins, 1996; Hogg, 2007; McGregor, Nail, Marigold, & Kang, 2005; McGregor, Zanna, Holmes, & Spencer, 2001; Shah et al., 1998; van den Bos, Poortvliet, Maas, Miedema, & van den Ham 2005). Groups may also confer meaning by propping up a confident sense of self-worth (Tajfel & Turner, 2004; see also Greenberg, Solomon, & Pyszczynski, 1997; Sherman & Kim, 2005; Simon, Pantaleo, & Mummendey, 1995). In Western cultures, self-certainty and self-worth are closely intertwined (Baumgardner, 1990; Campbell, 1990), and both have been theoretically and empirically implicated as key elements of personal meaning (Baumeister, 1989; Greenberg et al., 1997; Heine et al., 2006; McGregor & Little, 1998), and self-affirmation (Sherman & Cohen, 2006). Accordingly, we propose that intergroup biases are psychologically powerful because they doubly affirm the certainty and self-worth of ingroup members. This proposal is consistent with social identity theory which positions self-worth and value identification at the psychological center of intergroup relations (Hogg, 2006; Hogg & Mullin, 1999; Tajfel & Turner, 2004).

Self-affirmation theory similarly (but not necessarily in reference to groups), emphasizes the importance of self-worth and values for optimal social functioning. Self-affirmation research has found that reminding people of either their clear value convictions or self-worth can reduce subsequent defensiveness and increase open-mindedness to various forms of threatening information (Sherman & Cohen, 2006). In one study, for example, a values affirmation manipulation eliminated participants' usual tendency to defensive dismiss arguments that contradicted their opinions (Correll, Spencer, & Zanna, 2004). In other research, self-worth affirmation eliminated participants' usual defensive rationalization of consumer choices (Heine & Lehman, 1997) and made them more open to information that threatened their important attitudes (Cohen, Aronson, & Steele, 2000). These examples illustrate the general finding from a now-large body of self-affirmation research indicating that value conviction and self-worth affirmations make people subsequently more open-minded than usual, and willing to consider potentially threatening information that they might otherwise reject (Sherman & Cohen, 2006). Accordingly, the present research investigates the hypothesis that the double affirmation inherent in active ingroup identification—of self-worth and values—should make high PNS individuals more accepting than usual of outgroups.

It is important to note that our hypothesis highlights a key distinction between the closely related, but different bases of social identity theory (Tajfel & Turner, 2004) and self-affirmation theory (Sherman & Cohen, 2006). Self-identity theory typically emphasizes links between ingroup identification and *more closed-minded* derogation of outgroups (Hogg, 2006). In contrast, self-affirmation theory emphasizes that active promotion of personal values and worth *decreases subsequent closed-mindedness*, including prejudice and hostility toward outgroup members and cultural critics (Fein & Spencer, 1997; McGregor et al., 2005, Study 3, 2001, Study 1; Schmeichel & Martens, 2005). The contrast between social identity and self-affirmation emphases can be understood by appreciating the distinction between values and worth that are conferred by *ambient* group identification (social identity theory) versus *active* self-affirmation conferred by instructions to *actively* affirm values and worth (self-affirmation theory). A wide range of research evidence now indicates that ambient pride is typically

associated with various forms of antisocial and defensive closed-mindedness (e.g., Crocker et al., 1987; McGregor & Marigold, 2003; McGregor et al., 2005; McGregor, Gailliot, Vasquez, & Nash, 2007; Vohs & Heatherton, 2001), but intentional affirmations of pride and values, in contrast, tend to relieve distress (McGregor, 2006a) and make people more open-minded afterwards (Sherman & Cohen, 2006). In the present research we follow the self-affirmation route, and assess whether active ingroup affirmation processes will promote subsequent openness to outgroups among those who are most dispositionally motivated to be closed.

Overview

Study 1 assesses whether spontaneous, active ingroup affirmation predicts less outgroup derogation than usual among high PNS individuals. Study 2 assesses effects of manipulated ingroup affirmation on outgroup derogation among high PNS individuals. Finally, in Study 3, independent of the group context we directly manipulate the presumed active ingredients of ingroup affirmation—certainty and self-worth—to tighten our argument for why ingroup affirmation relieves outgroup derogation among high PNS individuals. In Study 3 we expected that the double affirmation of both certainty and worth would have the same effect as the ingroup affirmation would in Study 2, on eliminating the usual high PNS antipathy toward outgroups.

Study 1

This correlational study assessed whether spontaneous ingroup affirmation would be associated with lower derogation of outgroups among participants with high PNS scores. We asked participants to describe a group they belonged to, and then we categorized the groups they nominated as either a social category or a dynamic affiliation (Lickel et al., 2000). Social categories, such as religion, ethnicity, or nationality, are thought to be particularly useful for self-identity because they tend to imply essential, shared characteristics of group members. Dynamic groups such as sports teams or clubs, on the other hand, refer less to shared, global, identity-relevant characteristics of group members and more to specific, functional interdependences among group-members. They are also more malleable. As such, on average they should presumably be less essentially self-relevant and therefore less valuable as sources of the worth and value. Indeed, after threats, high PNS individuals tend to cleave to well-defined social categories but not to dynamic affiliations (Dechesne, Janssen, & van Knippenberg, 2000). Accordingly, we expected high PNS participants would show less of their usual tendency toward outgroup derogation after having a chance to spontaneously affirm their social categories.

Methods

Twenty-two Canadian undergraduates (20 women, 2 men) received course credit for participation. The study was advertised as a paper-and-pencil investigation of "self-definition, personality, decisions, and attitudes." As many as four participants per session completed the materials in private cubicles.

PNS

After providing demographic information, participants completed the PNS scale ($\alpha = .71$). The PNS scale is a 12-item measure that asks respondents to rate their agreement with such statements as, "It upsets me to go into a situation without knowing what I can expect from it" and "I don't like situations that are

uncertain.” Ratings for each item were made using a 1 (*strongly disagree*) to 5 (*strongly agree*) scale.

Uncertainty exercise

In order to sharpen the motivational context for outgroup derogation all participants completed an uncertainty exercise in which they described personal conflicts and uncertainties associated with an unresolved personal dilemma. They further elaborated on the divergent values, difficulties, and consequences associated with each pole of the dilemma (materials adapted from McGregor et al., 2001). Past research with this and other uncertainty manipulations has found that uncertainty motivates defensive closed-mindedness, exaggerated consensus, and intergroup bias (Hogg, 2007; McGregor & Marigold, 2003; McGregor et al., 2001, 2005; van den Bos et al., 2005).

Spontaneous ingroup affirmation

All participants were then instructed to indicate an ingroup that they belonged to. They described it, what they shared in common with it, and why belonging to it was important to them. Two raters who were blind to participants' responses on the other experimental materials coded participants' nominated groups as either social categories (e.g., cultural, ethnic, religious, or national) or dynamic affiliations (based on Lickel et al., 2000). Social categories are more self-essential and permanent than dynamic groups. As such they are more reliable vehicles for meaningful self-worth and consensual certainty about shared reality (Baumeister, 1989; Hardin & Higgins, 1996; Heine et al., 2006; Hogg, 2007; McGregor & Little, 1998; Tajfel & Turner, 2004). Ten of the participants' ingroups were categorized as social categories and 12 were categorized as dynamic affiliations (Cohen's kappa = .91; disagreements in coding were resolved by a third rater).

Outgroup favorability

For the main dependent variable, participants read a short essay, written by a foreigner visiting Canada. The essay was critical of Canada, and Canada's treatment of foreigners. Participants then rated their agreement with five statements about the author and essay that included, “I think I would like the person who wrote this essay” and “I agree with this person's opinion of Canada” using scales from 0 (*very strongly disagree*) to 10 (*very strongly agree*) (materials were adapted from Greenberg et al., 1997). For comparison, participants also evaluated a second essay/author that reflected a pro-Canada opinion. It was not specified explicitly, but the tone of the essay implied that the author was a Canadian, or at very least shared ingroup opinions. We averaged participants' ratings of the outgroup essay/author and the ingroup essay/author to create separate indexes of outgroup favourability and ingroup favourability, respectively.

Results

We regressed participants' Outgroup Favorability ratings on (a) centered PNS scores, (b) effect-coded Ingroup Affirmation, and (c) the PNS \times Ingroup Affirmation interaction term. As suggested by Aiken and West (1991), all regression terms were entered into the regression model on the same step and interpreted simultaneously. We included centered Ingroup Favorability ratings as a covariate to rule out the possibility that the expected effects could reflect general changes in group evaluation.

First order PNS and Ingroup Affirmation effects did not significantly predict outgroup favorability ($ps > .30$). The PNS \times Ingroup Affirmation interaction was significant, however, $\beta = .48$, $t(17) = 2.29$, $p < .05$. As shown in Fig. 1, at high PNS (one standard deviation above the mean), the predicted value (PV) of Outgroup Favorability was higher among participants who had spontaneously affirmed important ingroups (i.e., social categories)

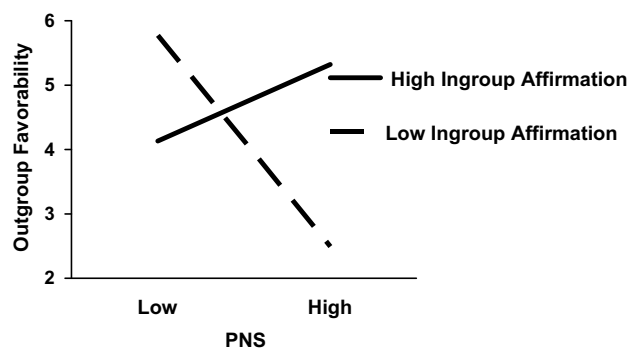


Fig. 1. Favorability toward outgroup member as a function of PNS and spontaneous ingroup affirmation.

($PV = 5.32$) than among those who had not (i.e., those who wrote only about dynamic affiliations) ($PV = 2.49$), $\beta = .65$, $t(17) = 2.07$, $p = .05$. At low PNS (one standard deviation below the mean), Outgroup Favorability did not differ between participants who wrote about social categories ($PV = 4.13$) versus dynamic affiliations ($PV = 5.77$), $\beta = -.38$, $t(17) = -1.32$, *ns*. Examining the simple effects from a different angle, among participants who wrote about dynamic affiliations, Outgroup Favorability was lower at high PNS ($PV = 2.49$) than at low PNS ($PV = 5.77$), $\beta = -.70$, $t(17) = -2.72$, $p < .05$. The findings of this correlational study indicate that spontaneous affirmation of important social categories is associated with less outgroup derogation among high PNS participants who are normally inclined toward outgroup derogation.

It is important to note that the interaction effect on Outgroup Favorability remained statistically significant even with Ingroup Favorability statistically controlled. Furthermore, in a second regression analysis with Ingroup Favorability as the criterion variable and centered Outgroup Favorability ratings as a covariate, there were no significant effects of first-order terms ($ps > .26$) or of the second order PNS \times Ingroup Affirmation interaction, $\beta = -.24$, $t(18) = -1.07$, *ns*. The specific finding for Outgroup Favorability, but not for Ingroup Favorability is encouraging. It suggests the possibility that Ingroup Affirmation might quell outgroup derogation without necessarily causing more extreme ingroup jingoism. A limitation of Study 1, however, is its inability to establish a causal effect of ingroup affirmation on outgroup favorability. We relied on participants' spontaneously generated ingroups and simply coded them as affirming or not based on whether they were social categories or dynamic affiliations. Study 2 experimentally manipulates ingroup affirmation.

Study 2

Based on the encouraging findings in Study 1, we expected that experimental affirmations of the positive and consensual aspects of participants' ingroups should increase outgroup favorability among high PNS individuals. There is a long history of theory and research demonstrating that individuals derive self-certainty from group consensus (e.g., Festinger, 1950; Hardin & Higgins, 1996; Shah et al., 1998). If consensual and positive ingroups doubly affirm certainty and self-worth, then they should promote openness to potentially threatening others (cf., Cohen et al., 2000; Correll et al., 2004).

Methods

One-hundred and nine undergraduates (30 men, 79 women) received course credit for their participation in this study that was advertised as an investigation of “personality, decisions, and

attitudes.” As many as four participants at a time completed the study materials in private cubicles. We discarded incomplete data from five participants.

Uncertainty exercise

As in Study 1, after completing a demographics questionnaire and the PNS scale ($\alpha = .68$), all participants deliberated about a currently unresolved personal dilemma—an exercise that has caused uncertainty and defensive closed mindedness in past research (e.g., McGregor et al., 2001).

Ingroup affirmation manipulation

Next, participants identified an ingroup that they belonged to, and then were randomly assigned to describe either how their own personal values were similar to or different from values of the ingroup. Participants were then randomly assigned to describe either good or bad qualities of their ingroup. Thus, the crossed ingroup consensus (similar, different) and ingroup positivity (good, bad) manipulations created four experimental conditions. The similar/good condition was expected to be most powerfully affirming.

Outgroup favorability

Finally, after completing a few minutes’ worth of paper and pencil measures related to other research hypotheses (reported in McGregor et al., 2005, Study 4), participants indicated their outgroup and ingroup favourability ratings as in Study 1.

Results

Outgroup favorability

We regressed participants’ outgroup favorability ratings on (a) centered PNS scores, (b) effect-coded values for Ingroup Positivity condition and Consensus condition, and (c) the second- and third-order interaction terms. All regression terms were entered into the model and interpreted simultaneously (Aiken & West, 1991). As in Study 1 we included the centered Ingroup Favorability variable as a covariate.

Analyses revealed no significant main effects ($ps > .17$). As predicted, however, the three-way PNS \times Ingroup Positivity \times Ingroup Consensus interaction was significant, $\beta = .23$, $t(94) = 2.28$, $p < .05$. The double affirmation of focusing high PNS participants on both the positive characteristics of their ingroups and similarities to their ingroups eliminated their usual outgroup derogation. As illustrated in Fig. 2, simple effect analyses revealed significantly more favorable outgroup evaluations at high PNS in the ingroup similar/good condition ($PV = 5.05$) than in the ingroup similar/bad condition ($PV = 2.56$), $\beta = .59$, $t(94) = 3.01$, $p < .005$. This similar/bad condition is the most relevant comparison for the double-affirma-

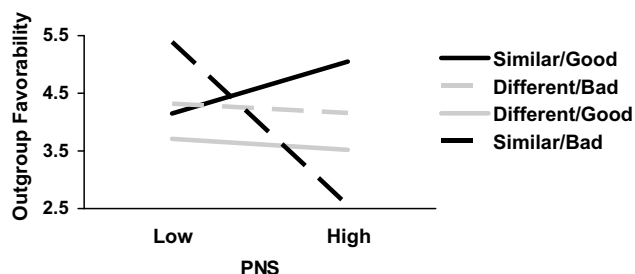


Fig. 2. Favorability toward outgroup member as a function of PNS, ingroup positivity, and ingroup consensus.

tion similar/good condition insofar as both conditions highlight the self-relevant character of the group (as in Study 1) but differ in the extent to which positive or negative features are highlighted. The conditions in which within-group differences were emphasized both resulted in middling outgroup evaluations, with the ingroup similar/good condition showing only marginally more positive outgroup evaluations than in the ingroup different/good condition ($PV = 3.52$), $\beta = .36$, $t(94) = 1.74$, $p < .10$. In sum, results indicate that affirming the positive qualities of consensual ingroups went furthest toward relieving the normal outgroup antipathy of participants with high PNS scores.

As one additional check on our assumption that Experiment 2 reflected ingroup affirmation effects, we also coded participants’ nominated ingroups as less or more potentially affirming. We used the same coding scheme as in Study 1 that differentiated between social categories (more potentially affirming) and dynamic affiliations (less potentially affirming) (inter-rater Cohen’s kappa = .92). Among participants who had nominated less potentially affirming ingroups ($n = 61$), the three-way PNS \times Ingroup Consensus \times Ingroup Positivity interaction effect disappeared, $\beta = .18$, $t(52) = 1.42$, *ns*; however, among participants who had nominated more potentially affirming ingroups ($n = 43$), the three-way interaction remained significant, $\beta = .42$, $t(33) = 2.39$, $p < .05$.¹

Consistent with our findings from Study 1, the results from Study 2 provided further evidence that doubly affirming ingroups can help people remain open-minded in the face of uncertainty. Specifically, focusing high PNS individuals on the consensual and positive features of their ingroups eliminated their usual outgroup derogation. Importantly, a parallel regression analysis with participants’ ingroup favorability ratings as the dependent variable and centered outgroup favorability ratings as a covariate yielded a non-significant PNS \times Ingroup Consensus \times Ingroup Positivity interaction, $\beta = .09$, $t(94) = .88$, *ns*. As in Studies 1, ingroup affirmation effects on outgroup favourability did not come at the cost of increasing jingoism about ingroups.

Study 3

The core assumption in Study 1 was that ingroup affirmation alleviated outgroup derogation by shoring up certainty and self-worth. We tested this assumption in Study 2 by manipulating the certainty (via consensus) and worthiness of ingroups. In Study 3 we extract these two active ingredients from the ingroup domain, and investigate their independent and joint effects on relieving the tendency toward outgroup derogation among high PNS individuals. After measuring PNS, we independently affirmed participants’ sense of personal certainty and self-worth. For the dependent variable, non-Muslim participants rated their attitudes toward the outgroup religion, Islam. Although attitudes toward Islam surely vary widely based on participants’ idiosyncratic experiences and information-based beliefs about Islam that may or may not be valid, such experiential and informational bases of opinions were not the focus of the present experiment. Rather, we randomly assigned participants to conditions in order to specifically investigate the interaction of dispositional and motivational factors on participants’ favorability toward the outgroup institution of Islam.

Methods

Seventy undergraduates (27 men, 43 women) received either course credit or \$5 for their participation. The experiment was advertised as exploring “relationships, opinions, personality, and

¹ The four-way PNS \times ingroup consensus \times ingroup positivity \times affirming-group interaction was marginally significant, $\beta = .19$, $t(87) = 1.69$, $p = .09$.

decisions." As many as six participants at a time completed the computerized materials in private cubicles.

Certainty manipulation

After completing the PNS scale ($\alpha = .80$) along with other personality questionnaires that took approximately 10 min to complete, participants were randomly assigned to write about either a friend's dilemma for which they had a clear and certain opinion about what the friend should do (certainty condition), or a currently unresolved personal dilemma (uncertainty condition, as in Studies 1 and 2). All participants were allocated 3 min to complete these materials, after which the computer automatically advanced to the next portion of the experiment. Certainty and uncertainty condition materials were adapted from McGregor et al. (2001).

Self-worth manipulation

Next, participants wrote about either a recent experience of personal success or personal failure (materials from McGregor, 2006a). Specifically, success condition participants were asked to write about a recent academic or vocational success, why this event was important to them, why they felt good about it, and what it said about them as a person. In contrast, failure condition participants were asked to write about a recent academic or vocational failure, why this event was important to them and why they felt badly about it. The time limit to complete this task was 3 min, after which the computer program moved participants to the final portion of the experiment.

Outgroup favourability

Participants used a five-point scale anchored by *strongly disagree* and *strongly agree* to rate their agreement with five positive statements about Islam (e.g., "Most people who practice Islam value peace" and "Islam promotes essentially the same good values as other world religions"). For comparison purposes, participants also rated their agreement with five positive statements about Canada (e.g., "I feel lucky to be living in Canada" and "Canada is among the best countries in the world in which to live"). Cronbach α reliabilities of the items assessing favorability towards Islam and Canada were .75 and .78, respectively. We averaged participants' ratings for statements about Islam and about Canada to create indexes outgroup and ingroup favorability, respectively.

Results

We regressed outgroup favorability onto (a) centered PNS scores, (b) effect-coded certainty and self-worth conditions, and (c) the second- and third-order interaction terms. As in Studies 1 and 2 we also included the centered ingroup favorability variable as a covariate.

Analyses revealed significant main effects for both certainty, $\beta = .22$, $t(61) = 2.00$, $p = .05$, and self-worth, $\beta = .26$, $t(61) = 2.29$, $p < .05$, with greatest outgroup favorability in the self-worth and certainty conditions. As predicted, these main effects were qualified by a significant $\text{PNS} \times \text{Certainty} \times \text{Self-Worth}$ interaction, $\beta = .34$, $t(61) = 2.95$, $p < .005$.

As shown in Fig. 3, it was only when high PNS participants had been doubly affirmed by both the certainty and self-worth manipulations that they rated Islam just as favourably as low PNS participants usually did. Specific simple effect analyses revealed that high PNS participants who had been doubly affirmed by certainty and self-worth rated Islam significantly more favourably ($PV = 4.05$) than did participants who had been only singly affirmed by self-worth ($PV = 3.28$), $\beta = .53$, $t(61) = 2.26$, $p < .05$, or by certainty ($PV = 4.05$) ($PV = 3.28$), $\beta = .53$, $t(61) = 2.65$, $p < .05$. Thus the usual tendency for people with high PNS scores to derogate

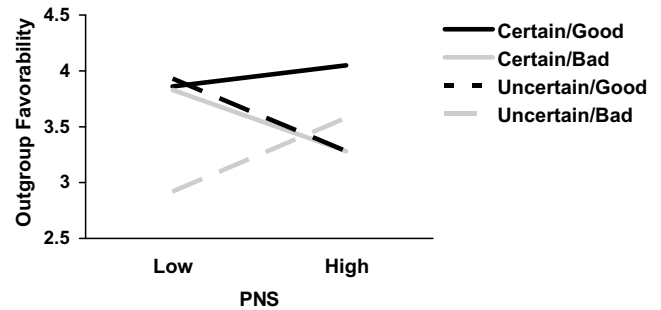


Fig. 3. Favorability toward outgroup as a function of PNS, certainty, and self-worth.

outgroups was eliminated only when they were doubly affirmed with certainty and self-worth.

Self-worth and certainty have been theoretically and empirically identified as the elements of group identification that impart psychological meaning (Heine et al., 2006; Hogg, 2007; Tajfel & Turner, 2004). Accordingly, the Study 3 findings conceptually replicate the Study 1 and 2 findings with the active psychological ingredients distilled from the ingroup context. Importantly, as in Studies 1 and 2 there were no corresponding simple effects of the affirmation manipulations on high PNS participants' *ingroup* evaluations of Canada ($ps > .69$). This indicates that, as in Studies 1 and 2, the positive intergroup effect of the certainty and self-worth affirmations does not cause the undesirable side-effect of a smug superiority.²

Finally, for participants with low PNS, a much different pattern emerged. It was only when low PNS participants were not affirmed at all that they rated Islam as unfavorably as high PNS participants usually did. Specific simple effect analyses revealed that low PNS participants were significantly less favourable toward Islam in the uncertain/bad condition ($PV = 2.92$) than in either the uncertain/good condition ($PV = 3.93$), $\beta = .69$, $t(61) = 3.10$, $p < .005$ or the certain/bad condition ($PV = 3.83$), $\beta = .62$, $t(61) = 2.67$, $p < .01$. This finding highlights the opposite side of the group affirmation coin. Under threat, even normally open-minded individuals tend to become closed-mindedly chauvinistic (cf., Nail et al., 2007).

Discussion

Three studies examined effects of ingroup affirmations on the high PNS tendency toward outgroup derogation. In Study 1, spontaneous ingroup affirmation eliminated the usual high PNS derogation of outgroup members. In Study 2, doubly affirming consensus and worthiness of ingroups did the same. In Study 3, actively affirming the meaningful ingredients of ingroup identification—certainty and self-worth—eliminated high PNS individuals' usual disdain for an outgroup religion. Moreover, all three studies found that the reduction of high PNS outgroup derogation did not come at the cost of causing more jingoism for ingroups.

² Parallel analyses with ingroup favorability as the dependent variable and centered outgroup favorability as a covariate revealed non-significant main effects for certainty and self-worth ($ps > .38$). There was, however, a significant $\text{PNS} \times \text{certainty} \times \text{self-worth}$ interaction, $\beta = .28$, $t(61) = 2.28$, $p < .05$. This interaction was driven by the simple effect of PNS in the uncertain/bad condition: Ingroup evaluations were significantly higher at high PNS ($PV = 4.47$) than at low PNS ($PV = 3.33$), $\beta = .85$, $t(61) = 3.69$, $p < .001$, indicating that among non-affirmed participants, those with high PNS were more jingoistic than those with low PNS. Furthermore, at high PNS in the uncertainty condition, ingroup evaluations were higher in the failure condition ($PV = 4.47$) than in the success condition ($PV = 3.71$), $\beta = .58$, $t(61) = 2.50$, $p < .05$. This indicates that high PNS individuals were most jingoistic about their ingroup when not at all affirmed.

These results are important because they provide the first experimental evidence that ingroup affirmation can foster positive social outcomes, specifically among people with a dispositional (i.e., high PNS) tendency toward outgroup derogation. Importantly, PNS interacted in the same way with the presumed elements of ingroup affirmation—certainty and self-worth—regardless of whether those elements were manipulated in a group context (Study 2) or not (Study 3). In both studies, it was when high PNS participants were doubly affirmed with certainty (or consensus as a proxy for certainty in Study 2) and worth that they most enthusiastically embraced outgroups. Across the three studies, at high PNS, the most positive outgroup evaluations emerged after the affirming features of ingroups had been actively affirmed. Across all three studies, high PNS participants were least open to outgroups when they had least opportunity to affirm elements meaningful ingroups.

These findings are consistent with classic theories of authoritarianism and fascism, which hold that rigid disdain for outgroups is a defensive reaction to personal vulnerability (Adorno, Frenkel-Brunswick, Levinson, & Sanford, 1950; Fromm, 1941), and with contemporary research that links conservative and defensive social cognition with situational and dispositional measures of personal vulnerability (Jost et al., 2003; McGregor, 2003, 2004, 2006b; McGregor & Jordan, 2007; Nail et al., 2007). Our results suggest that consensual ingroups may be particularly appealing to vulnerable individuals because of the powerful double affirmation that consensual ingroups purvey. Such powerful double affirmations allow high PNS people to be open to become outgroups presumably because defensive outgroup derogation is no longer necessary as a means of bolstering the self (cf., Fein & Spencer, 1997; McGregor et al., 2001).

The present results support the basic assumption of multiculturalism policies. They suggest that encouraging people to affirm their own meaningful ingroups might be one way to defuse intergroup conflict (cf., Moghaddam, 2008; Verkuyten, 2006). In our laboratory experiments, at least, people inclined toward chauvinism were less critical of outgroups and outgroup members after elements of their own meaningful ingroups had been affirmed.

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References

- Adorno, T. W., Frenkel-Brunswick, E., Levinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality*. New York: Harper.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.
- Baumeister, R. F. (1989). Social intelligence and the construction of meaning in life. In D. Buss & N. Cantor (Eds.), *Personality psychology: Recent trends and emerging directions*. Springer Verlag.
- Baumgardner, A. H. (1990). To know oneself is to like oneself: Self-certainty and self-affect. *Journal of Personality and Social Psychology*, 58, 1062–1072.
- Campbell, J. D. (1990). Self-esteem and clarity of the self-concept. *Journal of Personality and Social Psychology*, 59, 538–549.
- Cohen, G. L., Aronson, J., & Steele, C. M. (2000). When beliefs yield to evidence: Reducing biased evaluation by affirming the self. *Personality and Social Psychology Bulletin*, 26, 1151–1164.
- Correll, J., Spencer, S. J., & Zanna, M. P. (2004). An affirmed self and an open mind: Self-affirmation and sensitivity to argument strength. *Journal of Experimental Social Psychology*, 40, 350–356.
- Crocker, J., Thompson, L. L., McGraw, K. M., & Ingerman, C. (1987). Downward comparison, prejudice, and evaluations of others: Effects of self-esteem and threat. *Journal of Personality and Social Psychology*, 52, 907–917.
- Dechesne, M., Janssen, J., & van Knippenberg, A. (2000). Derogation and distancing as terror management strategies: The moderating role of need for closure and permeability of group boundaries. *Journal of Personality and Social Psychology*, 79, 923–932.
- Department of Canadian Heritage. (1988, July). *Canadian Multiculturalism Act*. Retrieved May 2007 from http://www.pch.gc.ca/progs/multi/policy/act_e.cfm.
- Durkheim, E. (1951). *Suicide: A study in sociology*. Glencoe, Illinois: The Free Press.
- Fein, S., & Spencer, S. J. (1997). Prejudice as self-image maintenance: Affirming the self through derogating others. *Journal of Personality and Social Psychology*, 73, 31–44.
- Festinger, L. (1950). Informal social communication. *Psychological Review*, 57, 271–282.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Evanston, Illinois: Row, Peterson and Company.
- Fromm, E. (1941). *Escape from freedom*. New York: Holt, Rinehart, and Winston.
- Greenberg, J., Solomon, S., & Pyszczynski, T. (1997). Terror management theory of self-esteem and cultural worldviews: Empirical assessments and conceptual refinements. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 29, pp. 61–139). San Diego, CA: Academic Press.
- Hardin, C. D., & Higgins, E. T. (1996). Shared reality: How social verification makes the subjective objective. In *Handbook of motivation and cognition*. In R. M. Sorrentino & E. T. Higgins (Eds.), *The interpersonal context* (Vol. 3, pp. 28–84). Guilford Press.
- Heine, S. J., & Lehman, D. R. (1997). Culture, dissonance, and self-affirmation. *Personality and Social Psychology Bulletin*, 23, 389–400.
- Heine, S. J., Proulx, T., & Vohs, K. D. (2006). The meaning maintenance model: On the coherence of social motivations. *Personality and Social Psychology Review*, 10, 88–110.
- Hogg, M. M. (2006). Social identity theory. In P. J. Burke (Ed.), *Contemporary social psychological theories* (pp. 111–136). Palo Alto, CA: Stanford University Press.
- Hogg, M. A. (2007). Uncertainty-identity theory. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 39, pp. 69–126). San Diego, CA: Academic Press.
- Hogg, M. A., & Mullin, B. (1999). Joining groups to reduce uncertainty: Subjective uncertainty reduction and group identification. In D. Abrams & M. A. Hogg (Eds.), *Social identity and social cognition*. Oxford: Blackwell Publishers.
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, 129, 339–375.
- Kruglanski, A. W., Shah, J. Y., Pierro, A., & Mannetti, L. (2002). When similarity breeds content: Need for closure and the allure of homogeneous and self-resembling groups. *Journal of Personality and Social Psychology*, 83, 648–662.
- Landau, M. J., Greenberg, J., Solomon, S., Pyszczynski, T., & Martens, A. (2006). Windows into nothingness: Terror management, meaninglessness, and negative reactions to modern art. *Journal of Personality and Social Psychology*, 90, 879–892.
- Lickel, B., Hamilton, D. L., Wierzchowska, G., Lewis, A., Sherman, S. J., & Uhles, A. N. (2000). Varieties of groups and the perception of group entitativity. *Journal of Personality and Social Psychology*, 78, 223–246.
- McGregor, I. (2003). Defensive zeal: Compensatory conviction about attitudes, values, goals, groups, and self-definition in the face of personal uncertainty. In S. Spencer, S. Fein, & M. Zanna (Eds.), *Motivated social perception: The Ontario Symposium* (Vol. 9, pp. 73–92). Mahwah, NJ: Erlbaum.
- McGregor, I. (2004). Zeal, identity, and meaning: Going to extremes to be one self. In J. Greenberg, S. L. Koole, & T. Pyszczynski (Eds.), *Handbook of Experimental Existential Psychology* (pp. 182–199). New York: Guilford.
- McGregor, I. (2006a). Zeal appeal: The allure of moral extremes. *Basic and Applied Social Psychology*, 28, 343–348.
- McGregor, I. (2006b). Offensive defensiveness: Toward an integrative neuroscience of compensatory zeal after mortality salience, personal uncertainty, and other poignant self-threats. *Psychological Inquiry*, 17, 299–308.
- McGregor, I., Gailliot, M. T., Vasquez, N., & Nash, K. A. (2007). Ideological and personal zeal reactions to threat among people with high self-esteem: Motivated promotion focus. *Personality and Social Psychology Bulletin*, 33, 1587–1599.
- McGregor, I., & Jordan, C. H. (2007). The mask of zeal: Low implicit self-esteem, and defensive extremism after self-threat. *Self and Identity*, 6, 223–237.
- McGregor, I., & Little, B. R. (1998). Personal projects, happiness, and meaning: On doing well and being yourself. *Journal of Personality and Social Psychology*, 74, 494–512.
- McGregor, I., & Marigold, D. C. (2003). Defensive zeal and the uncertain self: What makes you so sure? *Journal of Personality and Social Psychology*, 85, 838–852.
- McGregor, I., Nail, P. R., Marigold, D. C., & Kang, S.-J. (2005). Defensive pride and consensus: Strength in imaginary numbers. *Journal of Personality and Social Psychology*, 89, 978–996.
- McGregor, I., Zanna, M. P., Holmes, J. G., & Spencer, S. J. (2001). Compensatory conviction in the face of personal uncertainty: Going to extremes and being oneself. *Journal of Personality and Social Psychology*, 80, 472–488.
- Moghaddam, F. M. (2008). *Multiculturalism and intergroup relations: Psychological implications for democracy in global context*. Washington, DC: American Psychological Association.
- Moskowitz, G. B. (1993). Individual differences in social categorization: The influence of personal need for structure on spontaneous trait inferences. *Journal of Personality and Social Psychology*, 65, 132–142.
- Nail, P. R., McGregor, I., Drinkwater, A. E., Steele, G. M., Thompson, A. W., Thakurdeen, A. (2007). *Threat Causes Liberals to Think Like Conservatives*. Unpublished manuscript, University of Central Arkansas.
- Neuberg, S. L., & Newsom, J. T. (1993). Personal need for structure: Individual differences in the desire for simpler structure. *Journal of Personality and Social Psychology*, 65, 113–131.

- Schaller, M., Boyd, C., Yohannes, J., & O'Brien, M. (1995). The prejudiced personality revisited: Personal need for structure and formation of erroneous group stereotypes. *Journal of Personality and Social Psychology, 68*, 544–555.
- Schmeichel, B., & Martens, A. (2005). Self-affirmation and mortality salience: Affirming values reduces worldview defense and death-thought accessibility. *Personality and Social Psychology Bulletin, 31*, 658–667.
- Shah, J. Y., Kruglanski, A. W., & Thompson, E. P. (1998). Membership has its (epistemic) rewards: Need for closure effects on in-group bias. *Journal of Personality and Social Psychology, 75*, 383–393.
- Sherman, D. K., & Cohen, G. L. (2006). The psychology of self-defense: Self-Affirmation Theory. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 38, pp. 183–242). San Diego, CA: Academic Press.
- Sherman, D. K., & Kim, H. S. (2005). Is there an "I" in "team"? The role of the self in group-serving judgments. *Journal of Personality and Social Psychology, 88*, 108–120.
- Simon, B., Pantaleo, G., & Mummendey, A. (1995). Unique individual or interchangeable group members? The accentuation of intragroup differences versus similarities as an indicator of the individual versus the collective self. *Journal of Personality and Social Psychology, 69*, 106–119.
- Tajfel, H., & Turner, J. C. (2004). The social identity theory of intergroup behavior. In J. Sidanius & J. T. Jost (Eds.), *Political psychology: Key readings* (pp. 276–293). New York: Psychology Press.
- The Economist, (2007, June 14th). *In praise of multiculturalism*.
- van den Bos, K., Poortvliet, P. M., Maas, M., Miedema, J., & van den Ham, E. J. (2005). An enquiry concerning the principles of cultural norms and values: The impact of uncertainty and mortality salience on reactions to violations and bolstering of cultural worldviews. *Journal of Experimental Social Psychology, 41*, 91–113.
- Verkuyten, M. (2006). Multiculturalism and social psychology. *European Review of Social Psychology, 17*, 148–184.
- Vohs, K. D., & Heatherton, T. F. (2001). Self-esteem and threats to self: Implications for self-construals and interpersonal perceptions. *Journal of Personality and Social Psychology, 81*, 1103–1118.