Short Note

The effects of mortality salience on intergroup bias between minimal groups

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Abstract

We tested the hypothesis, derived from terror management theory, that mortality salience would increase intergroup bias between minimal groups. After assignment to groups, participants wrote about death or a neutral topic, and rated the personality characteristics of the ingroup and outgroup. Results supported the hypothesis.

INTRODUCTION

According to terror management theory (TMT), humans, while driven toward self-preservation, are aware of the ineluctability of death (Solomon, Greenberg, &

Pyszczynski, 1991). The awareness of our mortality creates the potential for terror, but we avert the terror by maintaining a cultural anxiety-buffer. The first component is the *cultural worldview*, a symbolic construction of reality, shared by our group, that provides an explanation of our origin, a set of principles by which to live, and a description of what occurs after life. Worldviews help us deny our mortality by infusing subjective reality with order, meaning, permanence, stability, and the promise of immortality to those who live up to its standards of value. The second component is *self-esteem*, the belief that one is living up to the standards of value set by the worldview.

Because cultural worldviews are fragile, symbolic constructions, we strive for consenual validation of our worldview and our sense of value within it. We respond favourably to persons who support our worldview, and unfavourably to persons who do not, because supporters strengthen the effectiveness of our cultural anxiety-buffer and dissenters weaken our cultural anxiety-buffer.

Experiments conducted to evaluate TMT have tested the following hypothesis: if cultural worldviews serve to allay concerns about mortality, then making mortality salient to individuals should increase their need for faith in their worldview. Thus, mortality salience (MS) should lead to especially positive reactions to supporters of the worldview and especially negative reactions to dissenters. Research has supported this hypothesis, using targets of evaluation that impinged on important aspects of worldviews participants had possessed for a long time.

The minimal group paradigm (Tajfel, Billig, Bundy, & Flament, 1971) has been used to demonstrate that simply being placed into two distinct groups causes intergroup discriminations favouring the ingroup. We designed the present experiment to test the hypothesis that MS would intensify intergroup bias in minimal groups. Such an effect would suggest that variables that co-occur with real-world groups, such as a conflict of interest or previously existing hostility, are not necessary for MS to cause enhanced intergroup bias.

We conducted a pilot study (replicating methods used by Crocker and Schwartz, 1985) to test our hypothesis, but were unable to find significant intergroup bias when 28 participants were explicitly randomly assigned to groups. We continued by using two types of groups: one formed on the basis of explicit random assignment, and one formed on the basis of the participants' aesthetic preferences.

METHOD

Participants

One hundred and twenty-three psychology students participated. Data from 17 participants, distributed equally across conditions, were not used in the analyses; seven suspected the experiment concerned prejudice, and 10 did not follow the instructions. Participants were randomly assigned to conditions of the 2 [mortality salient (MS) versus mortality nonsalient (MNS)] × 2 (group assignment: aesthetic preferences versus random) design.

Procedure

Between eight and 12 participants participated in each session. The experimenter explained that the study was an investigation of how personality characteristics

and attitudes relate to decision making. Written instructions then informed the participants that they would make decisions about paintings, be assigned to one of two groups, complete questionnaires to assess personality characteristics and attitudes, and make decisions about other persons. They were then shown five pairs of paintings, and they wrote which member of each pair they preferred (Tajfel *et al.*, 1971). After the participants had completed two filler personality questionnaires, they were given an explanation of how they were assigned to a group. Half of the participants learned that the participants had been randomly assigned to either group A or group B. The others learned that their group membership was determined by preference for Klee's or Kandinsky's paintings. To manipulate MS, the Projective Life Attitudes Assessment (Solomon *et al.*, 1991) was then administered. It was described as a new projective test in which open-ended responses to questions are content analysed. In the MS condition, participants were asked to write about (a) what will happen to them as they physically die, and (b) the emotions that the thought of their own death arouses in them. Participants in the MNS condition were given parallel questions about watching television. To assess whether MS influences self-reported affect, participants were next asked to fill in the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988). Afterwards, participants evaluated themselves and other participants. They rated on 7-point scales how true each of eight positive and eight negative randomly ordered traits were for members of group A, members of group B, and themselves. Finally, they completed three forms of the Social Attitudes Inventory. They were to predict the attitudes of a member of their own group, the other group and their own, on a variety of issues (using 9-point scales).

RESULTS

To assess intergroup bias, composites of the trait ratings of the ingroup and outgroup were formed by reversing the ratings of the negative traits and adding them to the ratings of the positive traits. A 2 (assignment) × 2 (MS) between-participants × 2 (ingroup versus outgroup) within-participants ANOVA revealed a main effect for group, $F(1, 97) = 20.48$, $p < 0.001$, a group × assignment interaction, $F(1, 97) = 18.67$, $p < 0.001$, and a group × MS interaction $F(1, 97) = 10.98$, $p < 0.001$, qualified by the three-way interaction, $F(1, 97) = 3.83$, $p = 0.05$. Planned comparisons revealed that the aesthetic preference/MS participants rated their ingroup more positively than did participants in other conditions, $ts > 2.09$, $ps < 0.05$ (see Table 1).

  Similarity of attitudes was assessed by computing the absolute difference between each participant's reported level of agreement with each issue and the level of agreement predicted for an ingroup member and an outgroup member. The absolute difference for each of the items was averaged to form a composite measure of assumed attitude similarity. A 2 × 2 × 2 ANOVA produced a main effect for group, $F(1, 72) = 49.43$, $p < 0.001$, qualified by a group × assignment interaction, $F(1,72) = 21.12$, $p < 0.001$. Planned comparisons revealed that aesthetic preference participants rated the ingroup, as compared to the outgroup, as significantly more

Table 1. Mean intergroup bias scores

| | Aesthetic preferences | | Random | |
	MS	MNS	MS	MNS
Ingroup	5.46$_a$	5.08$_a$	5.02$_a$	5.01$_a$
Outgroup	4.93$_b$	4.95$_b$	4.96$_a$	5.06$_a$

Note. Larger means indicate more positive ratings. Within columns, means that share different subscripts differ at $p < 0.08$.

similar to themselves, $t(72) = 8.27$, $p < 0.001$, but that random participants did so only marginally, $t(72) = 1.74$, $p = 0.086$[1] (see Table 2).

Positive and negative affect were analysed with 2×2 ANOVAs[2]. For positive affect, an MS main effect occurred, $F(1, 104) = 4.58$, $p < 0.04$, suggesting that MS participants reported more positive affect ($M = 2.86$) than MNS participants ($M = 2.57$). No other effects were significant ($ps > 0.13$). Within-cell correlations and ANCOVAs suggested that the effects on bias were not mediated by positive or negative affect or assumed similarity.

DISCUSSION

The present research suggests that minimal group identity may serve the same terror management function as group identity based on long-term real-world distinctions. Research should attempt to replicate these findings with the allocation matrices developed by minimal group researchers. In the present experiment, intergroup bias did not occur when persons were randomly assigned to groups. Given that identification with groups may be necessary for intergroup bias to occur, future research should explore conditions under which persons are more and less likely to identify with groups formed on the basis of explicit random assignment. Future work should also examine mechanisms responsible for the MS effect.

Social identity theory (Tajfel, 1974) posits that intergroup bias results from the need to achieve or maintain a positive social identity. The need to maintain a positive

Table 2. Means for the interaction on similarity of attitudes

	Aesthetic preferences	Random
Ingroup	1.06	1.44
Outgroup	2.06	1.65

Note. Smaller means indicate greater attitudinal similarity.

[1]Due to time constraints, 32 participants did not complete the attitude measures; for them, the similarity measure could not be constructed.
[2]Degrees of freedom differ between bias and affect measures because seven participants did not rate one or both groups.

social identity is explained in terms of a need for self-esteem. This proposition argues that lowered self-esteem motivates greater intergroup bias. If thinking about death threatens self-esteem, the self-esteem hypothesis can explain the effects of MS on intergroup bias. This alternative explanation is inconsistent with the findings that MS did not cause increases in negative affect or decreases in positive affect, and affect did not relate to bias. According to TMT, in addition to fulfilling the need for self-esteem, groups fulfil the need for worldviews, and these needs are driven by potential for death terror. This preliminary evidence suggests the need for further theoretical and empirical work to understand the relation between TMT and social identity theory, particularly as they pertain to intergroup bias.

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