Group Processes & Intergroup Relations
G P I R

Article

Group Processes & Intergroup Relations
15(1) 39–55

DOI: 10.1177/1368430211415439
gpir.sagepub.com
SAGE

Shall I leave or shall we fight? Effects of threatened group-based self-esteem on identity management strategies

Sarah E. Martiny,[1] Thomas Kessler[2] and Vivian L. Vignoles[3]

Abstract

We examined the interplay of social identity threat and group-based self-esteem on the motivation to use two identity management strategies, namely social competition and individual mobility. Following social identity theory, we postulated that threatened high group-based self-esteem leads to an increased motivation to use competitive identity management strategies. Furthermore, following realistic conflict theory and the rejection–identification model, we hypothesized that threat might reduce the desire for individual mobility among group members low in group-based self-esteem. Results of Study 1 (N = 67), Study 2 (N = 109), and Study 3 (N = 101) supported these hypotheses. The results showed that threat leads to the motivation to show social competition for group members high in group-based self-esteem and that for group members low in group-based self-esteem threat decreases the motivation to leave the group. The results are discussed in relation to recent theories of intergroup relations.

Keywords

social identity theory, social identity threat, group-based self-esteem, identity management strategies

Paper received 04 March 2010; revised version accepted 31 May 2011.

How do group members deal with a threat towards the value of their group? Do they leave the group? Or do they become more loyal group members? When do they engage in collective action to restore or maintain a positive evaluation of their group? The aim of this paper is to focus on these questions by examining motivational dynamics underlying group members' management of their social identities. In particular, we explore the interplay of social identity threat and group-based self-esteem on the motivation to use different identity management strategies. Our predictions are derived from social identity theory (Tajfel & Turner, 1979), realistic conflict theory (e.g., Bornstein, 1992; Campbell, 1965; Sherif, 1966), and research on threatened egotism (e.g., Baumeister, Smart, & Boden, 1996).

[1]University of Konstanz
[2]Friedrich Schiller University of Jena
[3]University of Sussex

Corresponding author:
Sarah E. Martiny, University of Konstanz, Universitaetsstrasse 10, 78464 Konstanz, Germany.
Email: sarah.martiny@uni-konstanz.de

People are motivated to think positively about themselves (Taylor & Brown, 1988). According to social identity theory (SIT; Tajfel & Turner, 1979), when people belong to and identify with a social group, this group becomes part of their sense of self and contributes to their self-evaluation. Group members assess their group's standing by making intergroup comparisons on valued comparison dimensions. Group members are motivated to maintain and restore positive distinctiveness of their ingroup, which then reflects positively on their social identity. Thus, social identity theory (Tajfel & Turner, 1979) postulates a need for positive social identity. Yet, this construct (i.e., positive social identity) has been operationalized in terms of a broad range of measures including personal self-esteem (e.g., Brockener & Chen, 1996), collective self-esteem (e.g., Crocker & Luhtanen, 1990), collective identity (Ashmore, Deaux, & McLaughlin-Volpe, 2004), and group identification (Sidanius, Pratto, & Mitchell, 1994).

In the last decades, several researchers have attempted to distinguish and organize different dimensions of social identity (e.g., Ashmore et al., 2004; Cameron, 2004; Ellemers, Kortekaas, & Ouwerkerk, 1999; Jackson & Smith, 1999; Leach et al., 2008; Roccas, Sagiv, Schwartz, Halevy, & Eidelson, 2008; Sellers, Smith, Shelton, Rowley, & Chavous, 1998). In line with Ashmore et al. (2004), we assume social (or collective) identity to be a multidimensional construct. In the following work we focus on one particular aspect of social identity, namely the evaluative dimension. Ashmore and colleagues define this dimension as follows: "By evaluation, we refer to the positive or negative attitude that a person has toward the social category in question" (p. 86). In line with this definition, we understand the need for positive social identity as the need for an overall positive group image and group appraisal. Thus, high group-based self-esteem is a favorable global evaluation of one's group (for a similar definition at the individual level, i.e., personal self-esteem see Baumeister et al., 1996). We understand the construct of group-based self-esteem as one subcomponent of traditional collective identity measures, namely the evaluative dimension (for a similar argument see Ellemers et al., 1999).

Social identity theory (Tajfel & Turner, 1979) further postulates that intergroup comparisons sometimes lead to negative comparison outcomes which threaten or undermine the positive evaluation of one's group. This motivates group members to engage in activities to change such comparison outcomes and to maintain or reestablish a positive view of their group. Attempts to cope with negative comparison outcomes are called *identity management strategies* (Tajfel & Turner, 1979). Various types of identity management strategies have been distinguished in the literature (Blanz, Mummendey, Mielke, & Klink, 1998). Here, we focus on just two: individual mobility and social competition (Kessler & Mummendey, 2002; Mummendey, Kessler, Klink, & Mielke, 1999):

1. *Social competition*. Ingroup members may seek positive distinctiveness through direct competition with the outgroup. Group members try to improve the ingroup's position or to reverse the positions of the ingroup and outgroup on salient dimensions.
2. *Individual mobility*. The individual tries to leave, or dissociate from the group thereby improving her/his own status while the group's status is unchanged.

These two strategies are of particular interest because they represent an important theoretical contrast between individual and collective strategies. On the one hand, individual mobility is a strategy focusing on improving the group member's individual status; on the other hand, social competition is a collective strategy, aiming to improve the status of the whole group. Blanz et al. (1998) used factor analysis to examine the relation between individual and collective strategies, with individual mobility as a prototypical individual and social competition as a prototypical collective strategy. The results confirmed the distinction between the two strategies, even though—rather than being bipolar opposites as some have suggested—the strategies were

marginally positively intercorrelated. Thus, we understand individual mobility and social competition as distinct, but not necessarily incompatible, strategies.

Although SIT refers to various identity management strategies, empirical research on motivational dynamics underlying SIT has focused mainly on a single strategy: intergroup bias (Houston & Andreopoulou, 2003). Abrams and Hogg (1988) formalized explicitly what they viewed as the implicit motivational assumptions underlying SIT in the *self-esteem hypothesis*. The first corollary of the self-esteem hypothesis postulates that "successful intergroup discrimination will enhance social identity, and hence self-esteem" (p. 320). The second corollary postulates that "low or threatened self-esteem will promote intergroup discrimination because of the 'need' for positive self-esteem" (p. 320). Subsequently, numerous studies have tested these corollaries empirically (for reviews see Aberson, Healy, & Romero, 2000; Hewstone, Rubin, & Willis, 2002; Rubin & Hewstone, 1998). Whereas empirical evidence mainly supports the first corollary, the evidence for the second corollary is much more mixed. Almost no research supports the posited relation between low levels of self-esteem and ingroup bias. However, numerous studies demonstrate that group members high in collective identity show stronger ingroup bias and outgroup derogation when they are placed in situations of identity threat (e.g., Branscombe & Wann, 1994; Brown, Collins, & Schmidt, 1988; Crocker & Luhtanen, 1990; Crocker, Thompson, McGraw, & Ingerman, 1987). For example, Branscombe and Wann (1994) demonstrated that highly identified group members discriminated against the outgroup significantly more in the threat than in the no threat condition. Brockner and Chen (1996) found evidence for the same pattern, using a measure of personal self-esteem and threat to the personal identity.

Aiming to extend this research to other identity management strategies beyond ingroup bias and outgroup derogation, the present research examines the impact of social identity threat and group-based self-esteem on social competition and individual mobility. Important work by Ellemers and colleagues examined the impact of perceived sociostructural conditions on the choice of different identity management strategies (Ellemers, 1993; Ellemers, Wilke, & van Knippenberg, 1993). Although this research revealed important insights into strategy choices, it focused less on motivational aspects, and therefore questions concerning the motivational basis of these choices were left unanswered. Hence, our central question was: How does the value attached to a group (i.e., group-based self-esteem) interact with a social identity threat to determine individual and collective identity management strategies?

Notably, one previous study has aimed to investigate the interplay of social identity threat and identification on individual mobility (Ellemers, Spears, & Doosje, 1997, Study 1). The authors' goal was to investigate the effects of identification and permeability of group boundaries on the desire for individual mobility. They induced low status (social identity threat) to all participants in a minimal group paradigm and manipulated group identification (by manipulating the participants' group involvement; in terms of Ashmore et al.'s [2004] group attachment) and permeability of group boundaries. The results of the study show that low identifiers more strongly desired individual mobility compared to high identifiers, independent of the permeability of the group boundaries. However, Ellemers et al. (1997) did not directly manipulate identity threat, nor did they focus on the evaluative component of collective identity. Thus, we cannot be sure whether the greater desire for individual mobility among low identifiers was a response to identity threat or not. In fact, these authors (Ellemers et al., 1997; Study 2) found a similar effect of identification on desire for mobility even in the absence of identity threat, provided that the group memberships had been made salient through participation in an intergroup reward allocation task.

In the present work, we wanted to investigate systematically the combined influence of social identity threat and group-based self-esteem on identity management strategies. As we have stated

earlier, empirical findings regarding the second corollary of the self-esteem hypothesis (Abrams & Hogg, 1988) are mixed. However, they are consistent with research into threatened egotism in the literature on personal self-esteem (e.g., Baumeister et al., 1996; Bushman & Baumeister, 1998; Bushman et al., 2009). In contrast to the traditional view that low self-esteem causes violence and aggressive behavior, Baumeister et al. (1996) argued that the combination of high self-esteem and threat triggers defensive behavior. They argued that people regarding themselves very positively are strongly motivated to react when their favorable view of themselves is questioned, contradicted or challenged. This motivation stems from a discrepancy between two views of the self: a favorable self-appraisal and a much less favorable external appraisal. Baumeister and colleagues further state that people strongly react to their threatened egotism because they are extremely reluctant to revise their self-appraisals in a downward direction. This is consistent with empirical evidence demonstrating that people wish to hold positive views of themselves and seek to enhance their self-appraisals whenever possible (e.g., Greenwald, 1980; Taylor & Brown, 1988) and with work on the motivation of people to maintain consistent self-appraisals (e.g., De La Ronde & Swann, 1993; Swann, 1987).

We propose that similar processes take place on the group level. We expect that group members highly valuing their group (i.e., those with high pre-existing group-based self-esteem) will be especially motivated to restore their positive group image when receiving threatening information. This should be expected because threatening information is both discrepant with the motivation to maintain a positive group image and with the motivation to maintain consistent self- and group appraisals. In other words, an initially positive group perception (i.e., group-based self-esteem) serves as a standard to which incoming appraisals of group-related events are compared. Whenever these events are negatively discrepant to the standard, group members will use identity management strategies to cope with this negatively discrepant event and to reestablish the positive group perception. Further, we postulate that, because of their strong positive evaluation of their group, these group members will choose a collective strategy, not an individual one, aiming to increase the positivity of the whole group. We therefore predict that group members high in prior group-based self-esteem will react especially with social competition when they perceive threatening information.

Regarding individual mobility, possible predictions derived from existing literature are less clear. On the one hand, from the social identity approach and as suggested by the findings of Ellemers et al. (1997, Study 1), one might predict that group members low in group-based self-esteem would show an increased desire to leave the group when faced with threatening information. This prediction is also in line with research on impression management processes (e.g., Boen et al., 2002; Cialdini & Richardson, 1980; Snyder, Lassegard, & Ford, 1986). This research demonstrated the existence of a phenomenon called *cutting off reflected failure*, showing that "people may increase the distance between themselves and unsuccessful others in order to avoid any negative associations" (Synder et al., 1986, p. 383). This behavior seems especially likely for group members who evaluate their ingroup less positively (low group-based self-esteem). When these group members receive negative information about their group, they might be motivated to increase the distance between themselves and the group by leaving the group.

On the other hand, according to realistic conflict theory (e.g., Campbell, 1965; Sherif, 1966; Stein, 1976) and the rejection–identification model (for empirical evidence see for example; Jetten, Branscombe, Schmitt, & Spears, 2001), one might predict that threatening information about the ingroup would lead to increased group affiliation. Campbell (1965) summarized the main principles of realistic conflict theory by stating that threat can cause ingroup solidarity, increased awareness of one's ingroup identity, and increased tightness of group boundaries. In other words, threat might change the relation between the individual group member and the ingroup. Support for these predictions also comes from empirical work on the rejection–identification model, demonstrating for

example that perceiving oneself as a victim of prejudice can lead to increased identification with the ingroup (e.g., Branscombe, et al., 1999; Jetten et al., 2001). Thus, empirical evidence reveals that threat can enhance ingroup ties. However until now no work has addressed two further questions: (a) is this especially true for group members having low prior levels of group-based self-esteem, and even more importantly (b) does this transfer into a reduced desire to leave the group. Here, based on the work outlined above, we predict that threat might change the relation between group members with low group-based self-esteem and their group—and thus their wish to leave the group might disappear or even be reversed.

The plausibility of these two alternative predictions might be influenced by the specific research setting. The first prediction might hold true in minimal groups, within which group members do not associate much with their group membership (Ellemers et al., 1997). However, in real groups the latter prediction becomes more theoretically plausible because of the group history and prior experiences of group members with their group.

Overview and hypotheses

To our knowledge, the present work is the first empirical test of the interplay of social identity threat and group-based self-esteem on the motivation to use identity maintenance strategies of social competition and individual mobility. We manipulated social identity threat in order to examine the combined and interactive influence of threat and group-based self-esteem on group members' choice of individual and collective identity management strategies. We should reiterate that we understand these two strategies as not necessarily mutually exclusive, but as independent possibilities. This means that choosing one of the two strategies should not have an impact on the likelihood that the other strategy is chosen, as these two strategies are exemplars of a broad range of potential strategies to cope with social identity threat.

We examined the following hypotheses:

1. When group-based self-esteem is threatened, this will promote the use of social competition especially among those group members with initially high levels of group-based self-esteem.

Concerning individual mobility we tested two competing hypotheses:

2a. Group members with initially low group-based self-esteem will show an increased tendency to leave the group after the group identity is threatened or
2b. Group members having initially low group-based self-esteem will show a reduced tendency to leave their group after the group identity is threatened.

These hypotheses were tested in three studies. In the first study, social identity threat was manipulated by performance feedback (negative vs. neutral). In the second study social identity threat was manipulated by receiving negative versus neutral information about the ingroup. The procedure of the third study followed the procedure of the second study, however, instead of using a traditional measure of group-based self-esteem, this time the evaluative dimension of collective identity was assessed with the goal to replicate the findings of the first two studies and to test whether these two alternative approaches to measuring positive group identity function similarly. In addition, we added a measure of personal self-esteem to test whether the observed patterns would hold up when controlling for personal self-esteem. This would indicate that the results were indeed about managing one's group evaluation and not one's personal self-evaluation.

Study 1

This study was conducted to test the postulated interaction between group-based self-esteem and

threat on two identity management strategies. We extended Study 1 by Ellemers et al. (1997) by manipulating social identity threat and measuring both individual mobility and social competition as dependent variables using real, rather than artificial groups. We tested the postulated Hypothesis 1 that threatened high group-based self-esteem motivates social competition. Moreover, we investigated the two competing hypotheses (2a and 2b) concerning individual mobility: Either threat would increase the desire for individual mobility among those lower in group-based self-esteem (2a), or it would reduce it (2b).

Method

Participants and design We recruited 67 students from a large East German university. The sample included 43 women and 24 men whose mean age was 23.11 years (*SD* = 2.70; range: 19 to 32). The design included one continuous variable (initial level of group-based self-esteem) and one experimentally manipulated factor (threat vs. no threat). Participants were randomly assigned to one of the two experimental conditions. Dependent variables were the reported desire to show individual mobility and social competition.

Procedure Students walking through the main university building were approached by a female research assistant and were asked to participate in the study. Those who agreed to participate were led to the laboratory and were seated in one cubicle each in front of a computer. All information was given on the computer screen.

First, the participants read the general instructions including the cover story, which said that they were participating in a study on the performance of students from different European countries in verbal intelligence tests. Then they filled in the group-based self-esteem scale, measuring their esteem as German students. Next, participants were told that they would work on a task measuring verbal intelligence. Within the task they had to generate as many meaningful words from a letter string as possible. Each letter string was composed of eight randomly chosen letters. They were given one minute to work on each letter string, and there were 10 letter strings in total. After this task, participants read a short note about the performance of German students compared to students from other European countries. In the *threat condition*, they read that the first results of the study showed that German students performed worse in this verbal intelligence test than the mean of European students. The text indicated that the performance of German students was within the lowest third of the total range. In the *no threat condition*, participants were told that the performance of the German students was within the best third of the total range. It was not made explicit whether the performance of the participants was already included into these results. This is important, as we did not want to induce personal identity threat but social identity threat, and therefore we consciously avoided individual feedback.

Then the participants were asked to fill in the second part of the questionnaire, including perceived threat and the items of the identity management strategies. After finishing the demographic questionnaire, each participant was compensated with €3.00, debriefed, thanked, and dismissed.

Questionnaires Participants completed a pretest questionnaire including a group-based self-esteem scale, based on the State Self-Esteem Scale by Heatherton and Polivy (1991). We used the performance (e.g., "I think that we are inferior to others at the moment") and the social subscale (e.g., "I think that my group is liked by others") and reformulated the items in terms of groups. For reasons unrelated to the current results, we built two different versions of the self-esteem scale, each using half of the available items. Which half was used was randomized within each condition. Both halves of the group-based self-esteem scale consisted of six items ($\alpha = .77$; $\alpha = .73$). Items were rated from 1 (*I strongly disagree*) to 7 (*I strongly agree*). Regression analyses showed that which version of the group-based

self-esteem scale was used did not have an effect on the dependent variables (social competition: $\beta = -.11$, $p = .50$; individual mobility: $\beta = -.14$, $p = .31$) and therefore we did not analyse this variable further here.

As measures of the main dependent variables, participants responded to three items measuring individual mobility (e.g., "If I had the possibility, I would immediately change to a university in another European country"; $\alpha = .86$) and three items measuring social competition (e.g., "We will show the other European students that we are the smarter ones"; $\alpha = .81$). Both scales were adapted from Kessler and Mummendey (2002). We also included four items measuring perceived threat (e.g., "I feel threatened by the results of the study and its consequences for my group"; $\alpha = .67$). To avoid response sets, about one third of the items in each scale were reverse scored. Again, items were rated from 1 (*I strongly disagree*) to 7 (*I strongly agree*).

Results

Checks and data screening Before conducting our analyses, the data of seven non-German participants and the data of two outliers were excluded. Thus, 58 participants remained for analyses. The manipulation check showed a significant effect of the threat manipulation on perceived threat, $t(56) = 5.00$, $p \leq .01$. Participants in the threat condition ($M = 3.73$; $SD = 1.21$) felt more threatened than participants in the no threat condition ($M = 2.37$; $SD = 0.85$).

Social competition We expected that threat would increase the desire for social competition especially among group members higher in group-based self-esteem. For group members lower in group-based self-esteem, we predicted no relation between threat and social competition. As our hypothesis had a clear direction, we report one-tailed significance tests to test the main effects of threat and group-based self-esteem, their interaction effect, and the simple slope for the effect of threat among higher identifiers, all of which were predicted to be positive.[1]

Before running the regression analyses all continuous predictors were z-standardized (Aiken & West, 1991). Threat was contrast coded (threat = 1; no threat = −1). The regression analysis investigated the effects of prior group-based self-esteem, threat, and their interaction on social competition (Aiken & West, 1991). This regression was significant, $F(3, 54) = 2.83$, $p = .05$, explaining about 14% of the variance. The regression coefficient for prior group-based self-esteem was significant ($\beta = .31$, $p \leq .01$, one tailed), qualified by a significant interaction between group-based self-esteem and threat ($\beta = .23$, $p = .04$, one tailed; see Figure 1). We used the simple slopes method (Aiken & West, 1991) to investigate this interactive pattern in detail. As predicted, for participants higher in group-based self-esteem (1 *SD* above the mean) threat positively predicted their wish to show social competition ($\beta = .34$, $p = .02$, one tailed). For group members with lower group-based self-esteem (1 *SD* below the mean), threat was not related to the desire for social competition ($\beta = -.16$, $p = .42$).

Individual mobility We now tested the two competing hypotheses for group members lower in group-based self-esteem. We expected that, on average, group members lower in group-based self-esteem would show a greater desire for individual mobility, but we had competing hypotheses about whether threat would increase this desire (H2a) or reduce it (H2b). As the prediction of the interaction was not directional at this stage of the research, we used a two-tailed significant test.

The regression was marginally significant, $F(3, 54) = 2.23$, $p = .09$, and accounted for about 11% of the variance. The regression coefficient for group-based self-esteem was significant ($\beta = -.23$, $p = .05$, one tailed). Even though the interaction between group-based self-esteem and threat was not significant, there was a nonsignificant trend ($\beta = .20$, $p = .12$; see Figure 1). We used simple slopes to further investigate this interactive relation. For participants lower in

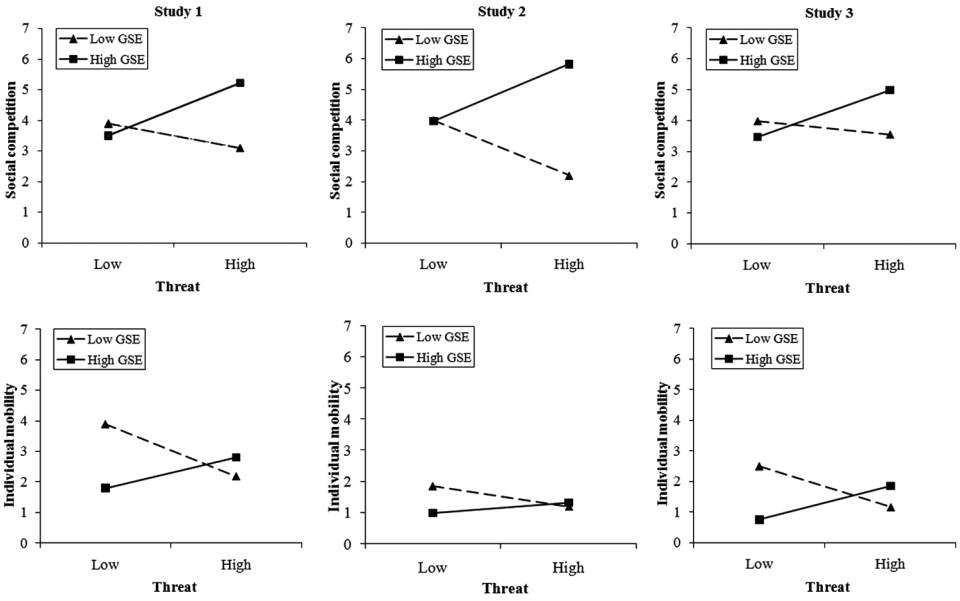

Figure 1. Simple slopes for the interaction of group-based self-esteem and threat on social competition (upper panel) and individual mobility (lower panel) in Study 1, Study 2 and Study 3.

group-based self-esteem, identity threat led to a nonsignificant reduction in the desire for mobility ($\beta = -.28$, $p = .16$). For participants higher in group-based self-esteem, threat did not affect the desire for mobility ($\beta = .16$, $p = .38$).

Correlations between the two strategies We found no significant correlation between the two strategies (individual mobility and social competition) in the threat condition ($r = .05$, *ns*) nor in the no threat condition ($r = .00$, *ns*).

Discussion

Focusing on social competition, the results supported our first hypothesis: The more positively group members evaluated their ingroup, the more likely that they would react to threatening information with social competition. More precisely, we suggest that the positive group perception (i.e., high group-based self-esteem) served as a standard against which an incoming appraisal of group-related events (here: threatening information in form of social comparison) was compared. The threat manipulation led to a negative discrepancy with the standard for all participants high in group-based self-esteem. In order to cope with this negative discrepant event and to reestablish the positive group perception, group members increased their desire for social competition with the outgroup, aiming to increase the status of the whole group.

Concerning individual mobility, we tested two competing hypotheses focused on the reactions of those participants lower in group-based self-esteem. We postulated either that these participants would increase their wish to leave the group (Hypothesis 2a), in line with a social identity approach (e.g., Ellemers et al., 1997; Tajfel & Turner, 1979), or that threat would decrease their wish to show individual mobility (Hypothesis 2b), in line with the realistic conflict theory (e.g., Sherif, 1966). The results of Study 1 pointed towards Hypothesis 2b although nonsignificantly. Participants lower in group-based self-esteem showed a nonsignificant reduction in desire to leave their group after receiving the threat; among participants higher in group-based self-esteem,

threat did not affect their desire to leave their group. Contrary to what might be predicted from social identity theory, when group members who do not value their group membership receive negative information about their group, their desire to leave their group does not increase and, if anything, it decreases. Thus, the results provided a clear basis to reject Hypothesis 2a. However, our test of Hypothesis 2b remained inconclusive. With a relatively small sample size in Study 1, we suspected that the lack of statistical significance might be due to insufficient statistical power. Hence, it seemed important to test whether this pattern of findings would be replicated in another study.

Study 2

In the first study, we induced social identity threat by giving participants negative performance feedback. We used a different threat manipulation in Study 2, focusing on regional rather than national identity of our participants. We induced threat by giving information that an outgroup discriminated against the ingroup. Thus, we were able to test whether the pattern of results found in Study 1 would be replicated in this different context.

An additional concern was to increase statistical power, especially for our test of Hypothesis 2b. Hence, we recruited a somewhat larger sample for this study. Moreover, having firmly rejected Hypothesis 2a based on the results of Study 1, we were now able to use one-tailed probability tests to evaluate Hypothesis 2b.

Method

Participants and design We recruited 109 students from a large East German university. The sample included 56 women and 53 men whose mean age was 22.3 years ($SD = 3.10$; range: 19 to 36). The study included again one continuous variable (group-based self-esteem) and one experimentally manipulated factor (threat vs. no threat). Participants were randomly assigned to one of the experimental conditions. Again, dependent variables were the desire for individual mobility and desire for social competition.

Procedure Students in the main university building were approached by a female research assistant and were asked to participate in the study. Those who agreed to participate were randomly assigned to one of the two conditions, and each participant was seated at a separate table.

First, they read the general instructions including the cover story, according to which the study examined employment rates based on different regions in Germany. After reading the general instructions, participants filled in the group-based self-esteem scale, measuring their esteem as East German students.

Afterwards they read a faked newspaper article. Participants in the *threat condition* read that a new representative study had been conducted among German employers. This study showed that West and East German employers prefer employing graduate students from West German universities, compared to graduate students from East German universities. According to the article, employers perceived students from West German universities to be better educated and more strongly achievement motivated then their colleagues from East German universities. The article in the *no threat condition* indicated that German employers do not have any regional preferences.

After reading the faked newspaper articles, participants completed the second questionnaire, including perceived threat, and the items of the identity management strategies. After finishing the demographic questionnaire, participants were compensated with a bar of chocolate, debriefed, thanked, and dismissed.

Questionnaires Measures were closely adapted from those used in Study 1, but were worded to refer to East German rather than German identity. Again we measured group-based self-esteem ($\alpha = .74$, for both versions), perceived threat ($\alpha = .74$), individual mobility ($\alpha = .88$), and social competition ($\alpha = .74$). Items were rated

from 1 (*I strongly disagree*) to 7 (*I strongly agree*). Again, the version of the group-based self-esteem scale did not have a significant effect (social competition: $\beta = .05$, $p = .63$; individual mobility: $\beta = -.08$, $p = .47$).

Results

Checks and data screening Before conducting the analyses, the data of seven participants who guessed parts of the hypotheses were excluded, as were the data of six participants who were not East Germans. The data of 96 participants remained for analyses. The manipulation check showed a significant effect of the threat manipulation on perceived threat, $t(94) = 3.43$, $p \leq .01$. Participants in the threat condition ($M = 4.02$; $SD = 0.95$) felt more threatened than participants in the no threat condition ($M = 3.29$; $SD = 1.13$).

Social competition Again, we expected that among group members higher in group-based self-esteem, threat should elicit the wish to show social competition. Following the procedure used in Study 1, we calculated multiple regression analyses using one-tailed significance tests for the main effects of threat and group-based self-esteem, and their interaction.

The regression for social competition was significant $F(3, 88) = 3.42$, $p = .02$, explaining about 11% of the variance. The regression coefficient of threat was significant ($\beta = .23$, $p \leq .01$, one tailed), qualified by a significant interaction of threat and group-based self-esteem ($\beta = .22$, $p \leq .01$, one tailed; see Figure 1). Simple slopes showed that for participants higher in group-based self-esteem (1 *SD* above the mean), threat was positively related to the wish to show social competition ($\beta = .48$, $p \leq .01$, one tailed). For participants lower in group-based self-esteem (1 *SD* below the mean) threat was not related to social competition ($\beta = .06$, $p = .70$).

Individual mobility Following the results of Study 1, we predicted that, among group members lower in group-based self-esteem, threat should lead to a reduced desire to leave the group. Since we had already ruled out Hypothesis 2a, we now tested Hypothesis 2b only, using one-tailed significance tests for the main effects of threat and group-based self-esteem, and their interaction.

The regression for individual mobility was significant $F(3, 88) = 4.94$, $p \leq .01$, explaining about 14% of the variance. The regression coefficient of group-based self-esteem was significant ($\beta = -.29$, $p \leq .01$, one tailed), qualified by a significant interaction of threat and group-based self-esteem ($\beta = .19$, $p = .04$, one tailed; see Figure 1). Simple slopes showed that, for participants higher in group-based self-esteem (1 *SD* above the mean), threat did not affect the desire for individual mobility ($\beta = .13$, $p = .37$). However, for participants lower in group-based self-esteem (1 *SD* below the mean), threat significantly reduced the desire for individual mobility ($\beta = -.26$, $p = .02$, one tailed).

Correlations between the two strategies Again, in the threat condition there was no significant relation between the desire to use the two strategies ($r = -.04$, *ns*). However, in the no threat condition a small positive correlation was found between the wish to deploy individual mobility and social competition ($r = .28$, $p = .05$).

Discussion

The results of Study 2 again supported our predictions and replicated the patterns of Study 1 using a different threat manipulation. As in Study 1, the more positively participants evaluated their group, the more strongly they wanted to show social competition when receiving negative information about their group. Overall, the results supported the view that group members strongly liking and valuing their group are especially sensitive to threatening information and therefore show an increased motivation to show competing behavior against the outgroup whenever receiving threat. This finding is in line with work on threatened egotism, demonstrating similar effects

on the personal level (e.g., Baumeister et al., 1996). More generally, in line with our predictions, this means that group members high in group-based self-esteem are motivated to increase the standing of the whole group.

The results regarding individual mobility showed the same pattern as in Study 1, supporting Hypothesis 2b, and this time they reached statistical significance. Participants lower in group-based self-esteem reduced their desire for individual mobility after the group was threatened. In line with realistic conflict theory (e.g., Sherif, 1966) and work on the rejection–identification model (e.g., Branscombe, et al., 1999), it seems reasonable to suggest that receiving a threat changed the relation of the individual group member to his or her group, and for this reason group members previously having lower group-based self-esteem reported a reduced wish to leave the group after being threatened. For participants higher in group-based self-esteem, the wish to leave the group was not affected by threat.

In addition, in contrast to the results of Study 1 we found a small but significant positive relation between the desires to deploy both strategies in the no threat condition. This means that when the group members' social identity was not challenged those participants who were motivated to engage in social competition were also more likely to be thinking about leaving the group.

Study 3

The main aim of the third study was threefold. First, we aimed to replicate the results in a further study to strengthen our confidence in the results on individual mobility. Second, we tested whether the line of argumentation developed in the theory that group-based self-esteem can be understood as the evaluative dimension of collective identity would withstand an empirical test. For this reason in Study 3 we measured group-based self-esteem using items measuring the evaluative dimension of collective identity according to Ashmore et al. (2004). Third, one might argue that the measures of group-based self-esteem used in the first two studies have also tapped personal self-esteem. To rule out this hypothesis, in the third study we tested whether the relation between group-based self-esteem and the desire to use the two identity management strategies would be replicated when controlling for the influence of personal self-esteem. Hence, we added a measure of personal self-esteem.

Method

Participants and design We recruited 101 students from a large East German university. The sample included 50 women and 51 men whose mean age was 22.3 years (SD = 3.05; range: 19 to 36). Again, the study included one continuous variable (group-based self-esteem) and one experimentally manipulated factor (threat vs. no threat). In this study instead of using the adopted State Self-Esteem Scale (SSES) that was used in Study 1 and 2, group-based self-esteem was operationalized using items traditionally used to assess the evaluative component of collective identity (Ashmore et al., 2004). Participants were randomly assigned to one of the experimental conditions. In addition to group-based self-esteem, we also assessed personal self-esteem using items from the Rosenberg scale (Rosenberg, 1965). As in the preceding studies, dependent variables were the desire for individual mobility and desire for social competition.

Procedure The procedure and materials were parallel with those of Study 2. Only the comparison group was changed, this time the comparison between Southern German versus Eastern German students was made salient. Again, in the *threat condition* students read a faked newspaper article stating that German employers preferred students from Southern German universities compared to students from Eastern German universities. The article in the *no threat condition* again indicated that German employers do not have any regional preferences.

Questionnaires Measures were closely adapted from those used in Study 1 and Study 2, and again were worded to refer to East German

identity. In contrast to Studies 1 and 2, we operationalized group-based self-esteem with five items typically used to assess the evaluative component of collective identity (e.g., "I like being Eastern German"; "I am proud of being an Eastern German"; $\alpha = .75$). In addition we assessed personal self-esteem using three items of the Rosenberg scale (e.g., "On the whole, I am satisfied with myself"; $\alpha = .64$). The same scales for measuring perceived threat ($\alpha = .71$), individual mobility ($\alpha = .88$), and social competition ($\alpha = .74$) were used as in Study 1 and 2. Items were rated from 1 (*I strongly disagree*) to 7 (*I strongly agree*).

Results

Checks and data screening The manipulation check showed a significant effect of the threat manipulation on perceived threat, $t(99) = 4.06$, $p \leq .01$. Participants in the threat condition ($M = 4.31$; $SD = 1.08$) felt more threatened than participants in the no threat condition ($M = 3.39$; $SD = 1.21$).

Social competition Again, we postulated that among group members higher in group-based self-esteem, threat should elicit the wish to show social competition. Following the procedure of the first two studies, we calculated multiple regression analyses using one-tailed significance tests for the main effects of threat and group-based self-esteem, and their interaction.

The regression for social competition was significant $F(3, 97) = 3.83$, $p \leq .01$, explaining about 11% of the variance. The regression coefficient of group-based self-esteem was significant ($\beta = .23$, $p \leq .01$, one tailed), qualified by a significant interaction of threat and group-based self-esteem ($\beta = .19$, $p = .03$, one tailed; see Figure 1). Simple slopes showed that for participants higher in group-based self-esteem (1 *SD* above the mean), threat was positively related to the wish to show social competition ($\beta = .29$, $p = .02$, one tailed). For participants lower in group-based self-esteem (1 *SD* below the mean) threat was not related to social competition ($\beta = -.09$, $p = .53$).

In addition, we computed a regression within which we entered personal and group-based self-esteem at the same time with the goal to compare the influence of both variables. Thus, we computed a regression analysis including personal self-esteem, group-based self-esteem, threat, and the interactions between personal self-esteem and threat, and between group-based self-esteem and threat. The regression was significant, $F(5,95) = 2.56$, $p = .03$, explaining about 12% of the variance (for the complete model see the first block of Table 1). The regression coefficient for group-based self-esteem ($\beta = .26$, $p \leq .01$, one tailed) was significant. In addition, the interaction between group-based self-esteem and threat remained significant ($\beta = .16$, $p = .05$, one tailed). No further coefficients or interactions were significant.

Individual mobility Following the results of Study 2, we predicted that, among group members lower in group-based self-esteem, threat should lead to a reduction in the desire to leave the group. Again, we followed the procedure used in Study 2 and calculated multiple regression analyses using one-tailed significance tests for the main effects of threat and group-based self-esteem, and their interaction.

The regression for individual mobility was significant $F(3, 97) = 5.84$, $p \leq .01$, explaining about 15% of the variance. The regression coefficient of group-based self-esteem was significant ($\beta = -.26$, $p \leq .01$, one tailed), qualified by a significant interaction of threat and group-based self-esteem ($\beta = .30$, $p \leq .01$, one tailed; see Figure 1). Simple slopes showed that, for participants higher in group-based self-esteem (1 *SD* above the mean), threat had a positive effect on the desire to leave the group ($\beta = .27$, $p = .04$). However, for participants lower in group-based self-esteem (1 *SD* below the mean), threat significantly reduced the desire for individual mobility ($\beta = -.33$, $p \leq .01$, one tailed).

Again, we also tested the competing influence of personal and group-based self-esteem and their interactions with threat in one regression. The regression was significant, $F(5, 95) = 4.63$,

Table 1. Summary of linear regression analysis for personal self-esteem, group-based self-esteem and threat and their interactions predicting social competition (first block of the column) and predicting individual mobility (second block of the column; $N = 101$; one tailed; Study 3)

Variable	*B*	*SE*	β	*p*
Predicting social competition				
Condition	.13	.12	.10	.15
Group-based self-esteem	.33	.12	.26	.005
Personal self-esteem	−.21	.18	−.17	.12
Personal Self-Esteem × Condition	.19	.25	.10	.23
Group-Based Self-Esteem × Condition	.20	.12	.16	.05
Predicting individual mobility				
Condition	−.03	.09	−.03	.37
Group-based self-esteem	−.23	.10	−.22	.01
Personal self-esteem	−.15	.14	−.15	.14
Personal Self-Esteem × Condition	−.12	.19	−.08	.26
Group-Based Self-Esteem × Condition	.30	.10	.30	.001

$p \leq .01$, explaining about 20% of the variance (for the complete model see the second block of Table 1). Again, there was a significant main effect for group-based self-esteem ($\beta = -.22, p \leq .01$, one tailed) and the interaction between group-based self-esteem and threat remained significant ($\beta = .30, p \leq .01$). No further effects were significant.

Correlations between the two strategies In the threat condition there was a marginally significant positive relation between the desire to use the two strategies ($r = .27, p = .06$). However, this time in the no threat condition there was no correlation between the two strategies ($r = .13$, *ns*).

Discussion

The results of Study 3 again supported our predictions and replicated the patterns of Study 1 and Study 2 using a different operationalization of group-based self-esteem. The more positively participants evaluated their group, the more strongly they wanted to show social competition when receiving negative information about their group. Thus, in line with our predictions, this means that group members high in group-based self-esteem are motivated to increase the standing of the whole group.

The results regarding individual mobility again supported Hypothesis 2b, replicating the patterns found in Study 1 and 2 and supporting the predictions of realistic conflict theory (Bornstein, 1992; Campbell, 1965; Sherif, 1966) and the rejection–identification model. Participants lower in group-based self-esteem reduced their desire for individual mobility after the group was threatened. In addition, for the first time we found evidence that when participants higher in group-based self-esteem received threat, they increased their desire to leave the group. For group members strongly valuing their group, the negative information has caused a different reaction than for group members not strongly valuing their group, increasing the motivation to distance oneself from the negatively evaluated group. This means that assumptions based on social identity theory (Tajfel & Turner, 1979) and impression management (e.g., Boen et al., 2002; Cialdini & Richardson, 1980) were supported only for group members high in group-based self-esteem. Thus, depending on the prior evaluative relation of the group member to his or her group, threat can trigger different motivational reactions. Importantly, this pattern was only found in one of three studies, therefore this finding should be interpreted with caution. Further studies should investigate this relation in detail.

Crucially, the findings discussed above remained significant when controlling for personal self-esteem and its interaction with threat, and personal self-esteem did not show a similar pattern of findings. This means that personal self-esteem does not explain the previously observed patterns. Thus, we are confident to conclude that the postulated and demonstrated motivational dynamics are indeed focused on the evaluation of one's ingroup, rather than individual self-evaluations.

Again the results showed a small but significant correlation between the desires to use the two strategies. However, this time the correlation in the threat condition was marginally significant. It seems that to some relatively low extent participants who are motivated to use one of the strategies also tend to use the other one.

General discussion

Taking the results of these three studies together, we can conclude that the first hypothesis (1) "*Threatened high group-based self-esteem will promote the use of social competition*" was supported empirically. In all three studies, among group members higher in group-based self-esteem, threat elicited the wish to show social competition. Among group members lower in group-based self-esteem, this relation did not appear. These results are in line with social identity theory (Tajfel & Turner, 1979) and provide evidence that processes taking place on the individual level as described in the literature on threatened egotism (e.g., Baumeister et al., 1996) also take place on the group level.

Regarding individual mobility, the second competing hypothesis (2b) was clearly supported empirically by the results of the second and third studies: "*Among group members having low group-based self-esteem, threatening information about the ingroup will lead to a decrease in their wish to leave the group*." This is in line with assumptions from realistic conflict theory (e.g., Sherif, 1966) and the rejection–identification model (e.g., Branscombe, et al., 1999). However, the results differ from expectations based on an earlier study (Ellemers et al., 1997, Study 1). We believe that this was the case for two main reasons. First, as indicated earlier Ellemers et al. (1997) did not manipulate social identity threat and therefore it seems questionable whether the greater desire for mobility they observed among lower identifiers can securely be interpreted as a response to threat. Indeed, we also found that participants with lower group-based self-esteem showed a stronger desire for individual mobility in all three studies—but this was not moderated by threat. Second, Ellemers and colleagues investigated minimal groups created artificially in the laboratory, whereas we investigated preexisting groups. Unlike minimal groups, members of preexisting groups share a group history and are often also known publicly as members of the group. Thus, it is much more difficult to leave a preexisting natural group compared to experimentally created groups. Hence, for group members who do not value their group much, a threatened social identity might motivate collective reactions, or at least reduce individual strategies such as leaving the group. We assume in line with earlier work that threat can increase the loyalty of a member towards his or her group, and thus the importance of group membership increases (Branscombe, et al., 1999; Jetten et al., 2001).

In addition, whereas in the first two studies a traditional self-esteem measure was used (adapted to focus on group membership), the findings were replicated in a third study operationalizing group-based self-esteem in terms of the evaluative dimension of collective identity (Ashmore et al., 2004). This result is first evidence that group-based self-esteem can indeed be understood as the evaluative dimension of collective identity (cf. Ellemers et al., 1999).

Consistent with earlier research (Blanz et al., 1998), the two investigated identity management strategies were not necessarily being mutually exclusive, but independent possibilities as demonstrated by the low correlations observed between the motivation to use the two strategies. Although the observed relations were not identical across the three studies, if any correlations appeared they were small and positive.

A further intriguing research question is the effect of threat and group-based self-esteem on

identity management strategies other than individual mobility and social competition. It would be especially interesting to explore which identity management strategy group members with lower group-based self-esteem do actually choose after being threatened collectively. The current studies were limited to these two strategies. However, in further research the various forms of social creativity should be taken into account. In line with this suggestion, further research should also investigate the role of sociostructural variables, while comparing threatened and not threatened groups. There is evidence that sociostructural variables play an important role in the choice of identity management strategies (e.g., Ellemers, 1993; Ellemers et al., 1993). Therefore, it seems important to investigate the role of these variables in conjunction with the motivational constructs investigated here.

In sum, our results provide first insights into the interplay of social identity threat and group-based self-esteem on the motivation to use two different identity management strategies. We found support for our argument that threatened high group-based self-esteem motivates the use of competitive identity management strategies. However, a different pattern of effects is apparent for individual mobility. Group members who do not value their group are more likely to leave their group when they are not threatened compared to when they are threatened. These results provide new information about the motivational dynamics underlying group members' management of their group identities. Although social identity theory (Tajfel & Turner, 1979) has initiated a large amount of research, the motivational dynamics underlying social identity management strategies have received only very partial attention until now, focusing only on intergroup discrimination. In this paper, we have begun to examine the motivational dynamics underlying the use of a wider range of identity strategies. In our eyes, this is a promising starting point for future research.

Acknowledgments

This research was funded by the Deutsche Forschungsgemeinschaft by a PhD fellowship to the first author in a Research Training Group (GRK 622). Sarah E. Martiny was at the Friedrich Schiller University of Jena when this research was conducted.

Note

1. Every directed hypothesis was tested one tailed. This will always be explicitly noted when the *p*-value is reported. Whenever this is not noted, a two tailed significance test was used.

References

Aberson, C. L., Healy, M., & Romero, V. (2000). Ingroup bias and self-esteem: A meta-analysis. *Personality and Social Psychology Review*, *4*, 157–173. doi: 10.1207/S15327957PSPR0402_04

Abrams, D., & Hogg, M. A. (1988). Comments on the motivational status of self-esteem in social identity and intergroup discrimination. *European Journal of Social Psychology*, *18*, 317–334.

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage Publications.

Ashmore, R. D., Deaux, K., & McLaughlin-Volpe, T. (2004). An organizing framework for collective identity: Articulation and significance of multidimensionality. *Psychological Bulletin*, *130*(1), 80–114. doi: 10.1037/00332909.130.1.80

Baumeister, R. F., Smart, L., & Boden, J. M. (1996). Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. *Psychological Review*, *103*(1), 5–33.

Blanz, M., Mummendey, A., Mielke, R., & Klink, A. (1998). Responding to negative social identity: A taxonomy of identity management strategies. *European Journalof SocialPsychology*,*28*(5),697–729.doi:10.1002/(SICI)1099-0992(199809/10)28:5<697::AID-EJSP889>3.0.CO;2-#

Boen, F., Vanbeselaere, N., Pandelaere, M., Dewitte, S., Duriez, B., Snauwaert, B., & …van Avermaet, E. (2002). Politics and basking-in-reflected-glory: A field study in Flanders. *Basic and Applied Social Psychology*, *24*, 205–214. doi: 10.1207/153248302760179129

Bornstein, G. (1992). The free-rider problem in intergroup conflicts over step-level and continuous public goods. *Journal of Personality and Social Psychology*, *62*, 597–606. doi: 10.1037/0022-3514.62.4.597

Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality and*

Social Psychology, *77*, 135–149. doi: 10.1037/0022-3514.77.1.135

Branscombe, N. R., & Wann, D. L. (1994). Collective self-esteem consequences of outgroup derogation when a valued social identity is on trial. *European Journal of Social Psychology*, *24*(6), 641–657. doi: 10.1002/ejsp.2420240603

Brockner, J., & Chen, Y. R. (1996). The moderating roles of self-esteem and self-construal in reaction to a threat to the self: Evidence from the People's Republic of China and the United States. *Journal of Personality and Social Psychology*, *71*, 603–615. doi: 10.1037/0022-3514.71.3.603

Brown, J. D., Collins, R. L., & Schmidt, G. W. (1988). Self-esteem and direct versus indirect forms of self-enhancement. *Journal of Personality and Social Psychology*, *55*(3), 445–453. doi: 10.1037/0022-3514.55.3.445

Bushman, B. J., & Baumeister, R. F. (1998). Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: Does self-love or self-hate lead to violence? *Journal of Personality and Social Psychology*, *75*, 219–229. doi: 10.1037/0022-3514.75.1.219

Bushman, B. J., Baumeister, R. F., Thomaes, S., Ryu, E., Begeer, S., & West, S. G. (2009). Looking again, and harder, for a link between low self-esteem and aggression. *Journal of Personality*, *77*(2), 427–446. doi: 10.1111/j.1467-6494.2008.00553.x

Cameron, J. E. (2004). A three-factor model of social identity. *Self and Identity*, *3*(3), 239–262. doi: 10.1080/13576500444000047

Campbell, D. T. (1965). Ethnocentric and other altruistic motives. In D. Levine (Ed.), *Nebraska Symposium on Motivation* (Vol. 13, pp. 288–290). Lincoln, NE: University of Nebraska.

Cialdini, R. B., & Richardson, K. D. (1980). Two indirect tactics of image management: Basking and blasting. *Journal of Personality and Social Psychology*, *39*(3), 406–415. doi: 10.1037/0022-3514.39.3.406

Crocker, J., & Luhtanen, R. (1990). Collective self-esteem and ingroup bias. *Journal of Personality and Social Psychology*, *58*, 60–67. doi: 10.1037/0022-3514.58.1.60

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*(5), 907–916. doi: 10.1037/0022-3514.52.5.907

De la Ronde, C., & Swann, W. B., Jr. (1993). Caught in the crossfire: Positivity and self-verification strivings among people with low self-esteem. In R. F. Baumeister & R. F. Baumeister (Eds.), *Self-esteem: The puzzle of low self-regard* (pp. 147–165). New York: Plenum Press.

Ellemers, N. (1993). The influence of socio-structural variables on identity management strategies. In W. Stroebe & M. Hewstone (Eds.), *European review of social psychology* (pp. 27–57). Chichester, UK: Wiley. doi: 10.1080/14792779343000013

Ellemers, N., Kortekaas, P., & Ouwerkerk, J. W. (1999). Self-categorisation, commitment to the group and group self-esteem as related but distinct aspects of social identity. *European Journal of Social Psychology*, *29*, 371–389. doi: 10.1002/(SICI)1099-0992(199903/05)29:2/3<371::AID-EJSP932>3.0.CO;2-U

Ellemers, N., Spears, R., & Doosje, B. (1997). Sticking together or falling apart: In-group identification as a psychological determinant of group commitment versus individual mobility. *Journal of Personality and Social Psychology*, *72*, 617–626. doi 10.1037/0022-3514.72.3.617

Ellemers, N., Wilke, H., & van Knippenberg, A. (1993). Effects of the legitimacy of low group or individual status on individual and collective status-enhancement strategies. *Journal of Personality and Social Psychology*, *64*, 766–778. doi: 10.1037/0022-3514.64.5.766

Greenwald, A. G. (1980). The totalitarian ego: Fabrication and revision of personal history. *American Psychologist*, *35*(7), 603–618. doi: 10.1037/0003-066X.35.7.603

Heatherton, T. F., & Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. *Journal of Personality and Social Psychology*, *60*, 895–910. doi: 10.1037/0022-3514.60.6.895

Hewstone, M., Rubin, M., & Willis, H. (2002). Intergroup bias. *Annual Review of Psychology*, *53*, 575–604. doi: 10.1146/annurev.psych.53.100901.135109

Houston, D. M., & Andreopoulou, A. (2003). Tests of both corollaries of social identity theory's self-esteem hypothesis in real group settings. *British Journal of Social Psychology*, *42*, 357–370. doi: 10.1348/014466603322438206

Jackson, J. W., & Smith, E. R. (1999). Conceptualizing social identity: A new framework and evidence for the impact of different dimensions. *Personality and Social Psychology Bulletin*, *25*(1), 120–135. doi: 10.1177/0146167299025001010

Jetten, J., Branscombe, N. R., Schmitt, M. T., & Spears, R. (2001). Rebels with a cause: Group identification

as a response to perceived discrimination from the mainstream. *Personality and Social Psychology Bulletin*, *27*(9), 1204–1213. doi: 10.1177/0146167201279012

Kessler, T., & Mummendey, A. (2002). Sequential or parallel processes? A longitudinal field study concerning determinants of identity-management strategies. *Journal of Personality and Social Psychology*, *82*, 75–88. doi: 10.1037/0022-3514.82.1.75

Leach, C., van Zomeren, M., Zebel, S., Vliek, M. W., Pennekamp, S. F., Doosje, B., & …Spears, R. (2008). Group-level self-definition and self-investment: A hierarchical (multicomponent) model of in-group identification. *Journal of Personality and Social Psychology*, *95*(1), 144–165. doi: 10.1037/0022-3514.95.1.144

Mummendey, A., Kessler, T., Klink, A., & Mielke, R. (1999). Strategies to cope with negative social identity: Predictions by social identity theory and relative deprivation theory. *Journal of Personality and Social Psychology*, *76*, 229–245. doi: 10.1037/0022-3514.76.2.229

Roccas, S., Sagiv, L., Schwartz, S., Halevy, N., & Eidelson, R. (2008). Toward a unifying model of identification with groups: Integrating theoretical perspectives. *Personality and Social Psychology Review*, *12*(3), 280–306. doi: 10.1177/1088868308319225

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Rubin, M., & Hewstone, M. (1998). Social identity theory's self-esteem hypothesis: A review and some suggestions for clarification. *Personality and Social Psychology Review*, *2*, 40–62. doi: 10.1207/s15327957pspr0201_3

Sellers, R. M., Smith, M. A., Shelton, J., Rowley, S. J., & Chavous, T. M. (1998). Multidimensional model of racial identity: A reconceptualization of African American racial identity. *Personality and Social Psychology Review*, *2*(1), 18–39. doi: 10.1207/s15327957pspr0201_2

Sherif, M. (1966). *Group conflict and co-operation: Their social psychology*. London, UK: Routledge & Kegan Paul.

Sidanius, J., Pratto, F., & Mitchell, M. (1994). In-group identification, social dominance orientation, and differential intergroup social allocation. *Journal of Social Psychology*, *134*, 151–167. doi: 10.1080/00224545.1994.9711378

Snyder, C. R., Lassegard, M., & Ford, C. E. (1986). Distancing after group success and failure: Basking in reflected glory and cutting off reflected failure. *Journal of Personality and Social Psychology*, *51*, 382–388. doi: 10.1037/0022-3514.51.2.382

Stein, A. A. (1976). Conflict and cohesion: A review of the literature. *The Journal of Conflict Resolution*, *20*, 143–172 doi: 10.1177/002200277602000106

Swann, W. B. (1987). Identity negotiation: Where two roads meet. *Journal of Personality and Social Psychology*, *53*(6), 1038–1051.

Tajfel, H., & Turner, J. (1979). An integrative theory of intergroup conflict. In M. A. Hogg & D. Abrams (Eds.), *Intergroup relations: Essential readings* (pp. 94–109). Philadelphia, PA: Psychology Press.

Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, *103*(2), 193–210.