Identity Fusion: The Interplay of Personal and Social Identities in Extreme Group Behavior

William B. Swann, Jr.
University of Texas, Austin

Ángel Gómez
Universidad Nacional de Educación a Distancia (UNED)

D. Conor Seyle
University of Texas, Austin

J. Francisco Morales and Carmen Huici
Universidad Nacional de Educación a Distancia (UNED)

The authors propose that when people become fused with a group, their personal and social identities become functionally equivalent. Two hypotheses follow from this proposition. First, activating either personal or social identities of fused persons should increase their willingness to endorse extreme behaviors on behalf of the group. Second, because personal as well as social identities support group-related behaviors of fused persons, the 2 forms of identity may combine synergistically, fostering exceptionally high levels of extreme behavior. Support for these hypotheses came from 5 preliminary studies and 3 experiments. In particular, fused persons were more willing to fight or die for the group than nonfused persons, especially when their personal or social identities had been activated. The authors conclude that among fused persons, both the personal and social self may energize and direct group-related behavior. Implications for related theoretical approaches and for conceptualizing the relationship between personal identities, social identities, and group processes are discussed.

Keywords: self-verification, identity fusion, social identity, personal identity

The attacks on the World Trade towers, the bombings in Madrid and London, and similar terrorist acts have prompted a perplexed world to ask why anyone would sacrifice themselves on behalf of a group. One prominent answer has been that the perpetrators of such extreme acts suffer from deep-seated uncertainties about the self (e.g., Kaplan, 1981; Post, 1984). Such *uncertain self* explanations are reassuring, for extreme acts that are due to a psychological anomaly occur rarely.

However reassuring such conceptualizations may be, systematic research has offered no support for the notion that terrorists have weak or wavering personal identities (e.g., Sageman, 2004). In this report, we take the opposite position, arguing that firmly held, rather than uncertain, identities may give rise to extreme behavior.

In particular, we suggest that extreme behavior emerges when people undergo a process of identity fusion, wherein their stable conceptions of themselves as individuals become fused with their identities as group members.

Identity Fusion and the Interplay of Personal and Social Identities

Whereas personal identities refer to properties of the individual such as *intelligent* or *extravert*, group identities refer to the groups with which individuals align themselves, such as *American*, *Democrat*, or family member. Although both personal and group identities are integral aspects of the larger self-system, most people draw a sharp distinction between the two. In fact, just as a physical barrier (the skin) separates people's bodies from the external world, a psychological divide (the self–other barrier) separates their personal identities from the identities of others.

Some individuals, however, may feel *one* or *fused* with a group. For fused individuals, the self–other barrier is blurred and the group comes to be regarded as functionally equivalent with the personal self. Instances of fusion are particularly common among members of *relational* groups, wherein group members have extremely close personal relationships with one another (e.g., family members, close friends, etc.). Nevertheless, people may also become fused with *collective* groups, even though they are unacquainted with many, if not most, of the other group members (e.g., country or political party). In this report, we focus on fusion with a collective group (country), as affinity with such groups reflects relatively pure feelings toward the group, feelings that are largely uncontaminated by affection toward individual members of the group.

We are especially interested in the nature and motivational consequences of the state of fusion. In particular, we propose that the personal self remains potent and influential among fused persons. In fact, for fused persons, group membership is intensely personal, for they feel that they care as much about the outcomes of the group as their own outcomes. Recognizing that their level of devotion to the group is quite extraordinary, fused persons may develop a feeling of personal responsibility to act on behalf of the group (cf., Codol's [1975] discussion of the "superior conformity of the self" and Deschamps' [1982] covariation model). If so, then fused persons are unique not only in the strength of their commitment to the group, but also in what they bring to the group: a motivationally potent personal self.

The possession of a potent personal self is especially relevant here because it may help fuel extreme behavior. That is, fighting or dying for one's group represents a profound statement regarding one's allegiance to the group. As such, simply noting that one shares many qualities with other group members may not be enough to motivate such extreme behavior. Instead, only people who possess extraordinarily high levels of motivation should theoretically be willing to engage in such extreme actions on behalf of the group. In short, when called upon to make supreme sacrifices for the group, people must be inclined to ask not what the group can do for them, but what they can do for the group.[1]

Readers familiar with social identity theory (Tajfel & Turner, 1979) and self-categorization theory (e.g., Turner et. al., 1979) may wonder how the fusion construct that we are introducing here differs from identification with the group. Identification is presumed to be high insofar as a group members' personal self-concept comes to agree with the characteristics expected from a prototypical group member. The greater this fit, the argument goes, the more the person is devoted to the group and finds that he or she is valued as a group member (Hogg & Hardie, 1991). There is considerable support for this conceptualization. Researchers have shown, for example, that highly identified persons are more apt to derogate members of outgroups (Brewer, 1999) and are inclined to see other group members in a positive light (Klar & Giladi, 1997).

Although both fusion and identification theoretically involve strong alignment with a group, there is a crucial difference between the two. In particular, when people identify with groups, they theoretically undergo a cognitive process of depersonalization. The fruits of this process are group members who see themselves as prototypical of the group and interchangeable with other group members (e.g., Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Depersonalized individuals may be well suited for falling in line and obeying orders issued by the group leader, but they lack the initiative to enact extraordinary actions for the group, as such activities are, by definition, nonprototypical. The opposite is true for fused persons. When people become fused with a group, they do not relinquish their sense of personal identity in favor of their group identity nor do they come to regard themselves as undifferentiated members of the group. Instead, fused persons retain a strong sense of personal identity. When this strong autonomous self becomes merged with the group, it can provide the motivational machinery needed for taking radical action on behalf of the group.

But the continued vitality of the personal identities of fused people does not just mean that they are willing to make extraordinary sacrifices for the group. In addition, because the personal identities of fused people continue to be salient upon entering groups, fused people remain vigilant for challenges to these identities and respond to such challenges by engaging in compensatory activity. Furthermore, because fused people regard their personal and social identities to be functionally equivalent, challenging either one should motivate efforts to shore up the other. Thus, for example, challenges to a personal identity may cause fused persons to take steps to shore up a group identity with which they are fused. The theoretical and empirical basis for this prediction comes from self-verification theory.

Self-Verification Strivings and Response to Challenges to the Self

In the tradition of symbolic interactionism (e.g., Cooley, 1902; Mead, 1934), self-verification theory assumes that people base their identities on the treatment they receive from others. Moreover, once they form identities, people begin using them to make predictions about their worlds, guide behavior, and maintain the perception that the world is knowable and coherent. Because identities serve these important functions, people become motivated to maintain them. Furthermore, this motivation emerges whether the identities happen to be positive or negative, as both types of identities foster the perception that the world is knowable and coherent.

Support for the proposition that people are motivated to maintain their identities comes from over 2.5 decades of research documenting the relationship between people's personal identities and overt behavior (for a recent review, see Swann, Chang-Schneider, & Angulo, 2007). Researchers have not only found that people gravitate toward settings and interaction partners that support their identities, they have discovered that the desire for self-verification is sufficiently powerful that it can override the well-documented tendency for people to prefer and seek positive evaluations (Jones, 1973). For example, when married people with negative identities find themselves with partners who see them more positively than they see themselves, they withdraw by becoming less intimate with them (e.g., Burke & Stets, 1999; De La Ronde & Swann, 1998; Murray, Holmes, Dolderman, & Griffin, 2000; Ritts & Stein, 1995; Schafer, Wickrama, & Keith, 1996; Swann, De La Ronde, & Hixon, 1994) or by separating from them or divorcing them (e.g., Cast & Burke, 2002). Furthermore, when people's personal identities are challenged by discrepant feedback (either positively or negatively), they compensate by intensifying their efforts to obtain self-verifying evaluations (e.g., Swann & Hill, 1982; Swann & Read, 1981; Swann, Wenzlaff, & Tafarodi, 1992).

The foregoing demonstrations of compensatory self-verification are especially interesting because they point to the operation of a broader compensatory process than the one implicated in some past research. For example, in a test of self-affirmation theory's (Steele, 1988) prediction that people work to maintain their sense of positive identities, researchers found that people responded to challenges to their positive identities by derogating a member of an outgroup (Fein & Spencer, 1997). On the basis of self-verification

---

[1] With apologies to John F. Kennedy (1961), who used a similar phrase in his inaugural speech.

theory, we suggest that such compensatory activity emerges in response to challenges to negative as well as positive identities.

We were specifically interested in how compensatory self-verification strivings might influence the behavior of people who are fused with their group. We began by noting that there is some evidence that self-verification processes can influence group behavior. For example, members of groups who verified one another's personal identities were more identified with the group and performed better than members of groups who did not enjoy high levels of self-verification (Polzer, Milton, & Swann, 2002; Swann, Kwan, Polzer, & Milton, 2003; Swann, Milton, & Polzer, 2000; for overviews, see London, 2003; Swann, Polzer, Seyle, & Ko, 2004). In addition, researchers have demonstrated that people seek verification for negative (and positive) identities associated with group membership. For example, some have shown that people seek verification for their collective identities (personal identities people associate with group membership, as in *sensitivity* for many women; Chen, Chen, & Shaw, 2004). Others have demonstrated verification strivings for group identities (convictions about the characteristics of the groups of which they are members; Lemay & Ashmore, 2004).

In this article, we extend this work by considering the implications of self-verification theory for the interplay of personal and social identities among fused versus nonfused individuals. The theory predicts that upon entering groups, fused people respond to challenges to their personal as well as social identities by attempting to shore up these identities. Moreover, because fused people regard their personal and social identities as functionally equivalent, they should respond to challenges to one class of self-view by striving to shore up the other class of self-view. For example, when fused people encounter challenges to their personal identities, they may compensate by attempting to shore up their social identities (e.g., Swann & Hill, 1982; Swann et al., 1992; Swann & Read, 1981, Study 2). In fact, any experience that activates either the personal or social identities of persons who are fused with a group should trigger pro-group activity. This pattern should not emerge among nonfused persons.

In short, the major goal of our research was to test the notion that fusion represents a distinctive form of allegiance to groups. In particular, contrary to the original statements of social identity and self-categorization theory, the fusion formulation assumes that the personal and social identities of fused persons may reinforce, rather than compete with, one another.

To test this conceptualization, we conducted three experiments. In the first two studies, we activated the personal identities of fused and nonfused participants by providing them with positive feedback that challenged several of their negative personal identities (of course, feedback that challenged a positive identity should have similar effects, but it would be unclear whether self-enhancement or self-verification strivings produced them). In Study 3, we used a different activation manipulation that was designed to make salient either personal or social identities. In all studies, we expected that activating either the personal or social identities of fused persons would increase their propensity to endorse fighting or dying for the group but that this pattern would not emerge among nonfused persons.

Prior to testing our experimental predictions, we needed to validate a measure of fusion. To that end, we conducted five preliminary studies.

Identifying Fused People: Preliminary Studies

To test our hypotheses regarding the interplay of personal and social identities among fused participants, we sought a measure that assessed the extent to which respondents possess a motivationally potent personal self that was one with a group. We reasoned that verbal measures of identification would be nonoptimal because none of these measures focus specifically on perceived oneness with the group. Instead, they focus on qualities such as satisfaction, solidarity, centrality, individual self-stereotyping, and ingroup homogeneity (Leach et al., 2008). For example, one of the most widely used measures of identification (Mael & Ashforth, 1992) measures endorsement of items such as "If a story in the media criticized my group, I would feel embarrassed" and "I am very interested in what citizens of other countries think about my group." To obtain high scores on such scales, one must believe that one shares features or outcomes with the group, but it is not necessary to have any deep feeling of oneness with, or connection to, the group. A Canadian, for example, may recognize that one shares many features and outcomes with other Canadians (producing a high identification score) but nevertheless have no emotional connection to Canada or its people (and thus feel no fusion with the group). The opposite scenario is also possible. For example, one might feel fused with a group that epitomizes one's values and ideals even though one might share few qualities or outcomes associated with the group.

To index fusion, we turned to a pictorial measure. Such measures typically depict the self and the group as separate entities (e.g., two circles) and ask respondents to indicate how much the two entities overlap. Such measures were ideal for our purposes because they represent a straightforward index of degree of alignment with the group that can draw on conscious as well as nonconscious material. In addition, pictorial measures can offer an option in which an object representing an autonomous self (e.g., a small circle) that could overlap completely with the object representing the group (e.g., a larger circle). We hypothesized that endorsers of the fused option would perceive a deep connection with the group that would motivate extreme behavior.

Our search for such a pictorial measure led us to an instrument that was originally developed to assess attachment in close relationships (Aron, Aron, & Smollan, 1992) and was subsequently modified to measure identification with groups (e.g., Coats, Smith, Claypool, & Banner, 2000). Scores on such scales are associated with verbal measures of identification with the group, perceived similarity of one's own attitudes to those of other group members and a measure of connection to the group on the basis of reaction times (Schubert & Otten, 2002; Smith & Henry, 1996; Tropp & Wright, 2001).

The measure we used in our research is depicted in Figure 1. The scale is a modified version of the one developed by Schubert and Otten (2002). To capture fusion in a manner that emphasized perceived overlap and nothing else, we had participants indicate which picture best represented the way they perceived their relationship with the group instead of choosing the option that best reflected their "closeness with the group." With this change, respondents reported difficulty discriminating two scale options from neighboring ones, so we deleted those options. The result was a scale that asked participants to choose among five symmetrical degrees of overlap (0%, 25%, 50%, 75%, and 100%).
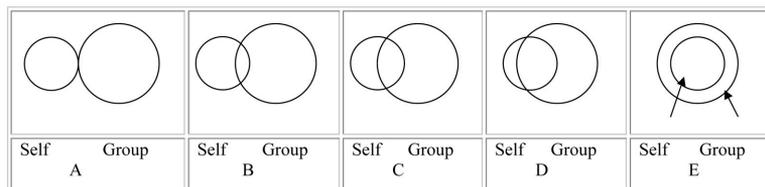
Figure 1. The measure of identity fusion.

Five preliminary studies tested several key assumptions about the scale: (a) A reasonable proportion of participants in our sample of Spanish Nationals would classify themselves as fused and that fusion would be related to, but distinct from, identification; (b) participants would perceive a dichotomous distinction between being fused with the group versus all other relations to the group and, as a result, they would take especially long choosing between the fused option and the adjacent option and report that this choice was particularly difficult; (c) fused persons would insist that they were more willing to engage in extreme behaviors on behalf of the group than other group members; (d) fused persons would actually endorse engaging in extreme behavior for the group more than nonfused persons; and (e) fusion is not a personality trait, so that being fused with one group would have little relation to likelihood of being fused with other groups.

In Study 1, 200 Spanish undergraduates (118 men, 82 women; mean age = 35 years, SD = 9.23) enrolled in Spain's National University of Distance Education (UNED) completed a survey online for class credit. In counterbalanced order, participants completed the measure of identity fusion and Mael and Ashforth's (1992) Identification Scale with reference to the group "Spain." As shown in Figure 2, scores on the fusion scale were distributed bimodally (b = .653; values greater than .555 indicate a significant bimodal distribution; SAS Institute, 1999).[2] In addition, the correlation between identification and fusion was moderate, whether fusion was treated as a dichotomous or continuous variable, rs(198) = .42 and .56, respectively.[3]

Participants reported relatively high levels of identification, with a mean of 3.09 (SD = .96, theoretical range = 1 to 5) and fusion with Spain, in that fully 40.5% or 81 participants selected the E option. By comparison, fusion rates in an independent sample of U.S. participants were about half as high. The relatively high rates of fusion in Spain presumably reflects a combination of cultural variables and recent events, such as several terrorist attacks, strife with immigrants, and tension within areas of Spain that want independence from the central government (i.e., Catalonia and the Vasque country).

Study 2 was designed to test the idea that the choice of the fused option is a psychologically compelling action that demands more thought than the choice of other options. To test this possibility, we informed 120 Spanish undergraduates (33 men, 87 women; mean age = 33.90 years, SD = 6.52) enrolled in UNED that they would be completing a pictorial measure of their relationship with Spain. Participants then received the measure of fusion and were instructed to choose the pair of circles that best represented their

relationship with Spain as quickly as possible. We timed how long they took to select their answer. To control for the tendency for our Spanish participants to scan written material from left to right (which could artifactually result in longer times for the options on the right hand side of the scale), we counterbalanced the configuration of the scale so that the options were sometimes presented as ABCDE and sometimes as EDCBA. In addition, we controlled for handedness.

An analysis of variance (ANOVA) on the time participants took to respond to different option of the fusion scale was significant, $F(4, 115)$ = 8.65, p < .001, η^2 = .23. A Tukey post-hoc test indicated that participants who choose the D or E options took more time (M = 9.03, SD = 4.68, and M = 9.27, SD = 6.32 s, respectively) than participants who chose the A, B, and C options (M = 2.24, SD = 6.36; M = 4.52, SD = 1.85; and M = 50.10, SD = 3.20 s, respectively; all ps < .05). No differences emerged between the D and E option (p = .87) or between the ABC options (all ps > .49).[4] A parallel pattern emerged when participants indicated how difficult it was for them to pick an option that best represented their relationship with the group. That is, participants imputed more difficulty to choosing between the D and E options (M = 4.09, SD = 0.17, and M = 4.37, SD = 0.11, respectively) than among the A, B, or C options (M = 1.92, SD = 0.23; M = 2.20, SD = 0.21; and M = 2.09, SD = 0.17, respectively), $F(4, 115)$ = 55.51, p < .001, η^2 = .66.

Study 3 tested the notion that fused participants would assert that they would do more for the group than nonfused persons. One hundred and seventy-seven Spanish undergraduates (76 men, 101 women; mean age = 33.04 years, SD = 12.02) enrolled in UNED completed a survey online for class credit. In counterbalanced order, participants completed the measures of identity fusion and identification with the country. Participants then completed (in

---

[2] Tests of the distributions of fusion scores in Pilot Studies 2–5 as well as Experiments 1–3 also reveal significant bimodality (all bs > .555; .555 is the cutoff for bimodality). Parallel tests of the distributions of identification scores indicated normality (b = .46).

[3] Fusion was more strongly related to Mael & Ashforth's (1992) scale than other identification scales, such as, Jetten et al.'s (2001), r(112) = .26, and Tropp & Wright's (2001), r(248) = .23. We accordingly used it in all subsequent investigations.

[4] Three participants who selected the D option were deleted from all analyses because they indicated that their second ranked alternative was C. All remaining participants indicated that their second ranked alternative was either D or E.
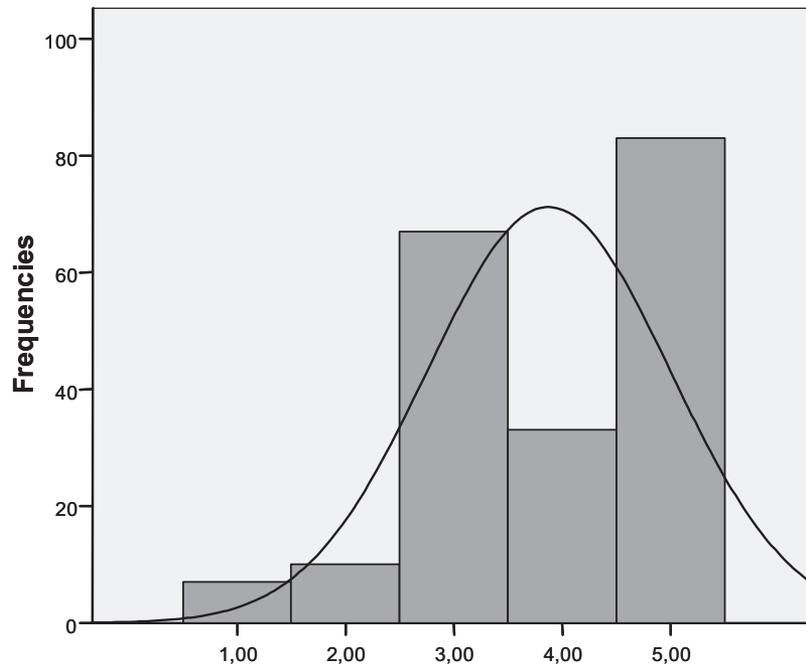
Figure 2. Distribution of scores on the fusion measure.

counterbalanced order) measures of willingness to fight and die for the group. They completed these measures twice, once for themselves and once for other group members. For the willingness to fight for the group items, on 7-point scales ranging from −3 (*totally disagree*) to 3 (*totally agree*) participants rated their agreement with these five items: "I would fight someone physically threatening another Spaniard," "I would fight someone insulting or making fun of Spain as a whole," "I would help others get revenge on someone who insulted Spain," "Hurting other people is acceptable if it means protecting the group," and "I'd do anything to protect the group." When summed, these items formed coherent scales (α = .75 for the *self* version, and .74 for the *others* version). For the willingness to die for the group items, participants rated their agreement with two items: "I would sacrifice my life if it saved another group member's life" and "I would sacrifice my life if it gave the group status or monetary reward" (α = .85 for the *self* version, and .83 for the *others* version).

To test the effect of fusion and identification on willingness to fight for the group, we created a difference score: perception of the self's willingness to fight for the group minus perception of other group member's willingness to fight for the group. A positive score indicates that participants thought they would be more willing to fight for the group than others, whereas a negative score indicates that they thought others would do more for the group than themselves would. Fusion, identification, and the Fusion × Identification interaction were regressed on the composite index. Only a main effect of fusion emerged, β = .43, $t(173)$ = 6.00, $p <$ .001, such that fused participants perceived that they were more willing to fight for the group than other group members (M = 0.39, SD = 0.81), whereas nonfused participants perceived that other group members were more willing to fight for the group than they themselves were (M = −0.38, SD = 0.77). Parallel analyses of the

willingness to die for the group measure also indicated that fusion was the only predictor, β = .23, $t(173)$ = 3.10, $p <$ .002, such that fused participants perceived that they were more willing to die for the group than other group members (M = 0.38, SD = 2.52), whereas nonfused participants perceived that other group members were more willing to die for the group than they themselves were (M = −0.61, SD = 1.71).

To better understand the precise nature of the fusion effect, we examined the impact of fusion on own versus others' endorsement of extreme behavior, with the later variable treated as a repeated measures factor. For the fight variable, a Fusion × Own–Other interaction emerged, $F(1, 175)$ = 36.05, $p <$ .001, η^2 = .19. Inspection of means indicated that nonfused participants thought that others would fight for the group more than they would (M = 0.33, SD = 1.17 vs. M = −0.4, SD = 1.21), $t(112)$ = −4.96, $p <$ .001. In contrast, fused participants indicated that they would fight more for the group than others would (M = 0.93, SD = 1.14 vs. M = 0.54, SD = 1.14), $t(63)$ = 3.71, $p <$ .001. The only other effect was a main effect of fusion, $F(1, 175)$ = 10.74, $p <$ .001, η^2 = .06.

A parallel analysis of the willingness to die variable revealed a Fusion × Own–Other interaction, $F(1, 175)$ = 9.61, $p <$ .002, η^2 = .05. Inspection of means indicated that nonfused participants thought that others would be more willing to die for the group than they would (M = −0.96, SD = 1.88 vs. M = −1.77, SD = 2.00), $t(112)$ = −3.77, $p <$ .001. However, fused participants thought that they would be more willing to die for the group than others would do (M = −0.03, SD = 1.72 vs. M = −0.41, SD = 1.93), $t(63)$ = 1.98, $p <$ .05. A main effect of fusion, $F(1, 175)$ = 17.15, $p <$ .001, η^2 = .09, was the only other effect.

Study 4 was designed to determine if the results of Study 3 might be an artifact of two properties of the fusion scale that

encouraged respondents to assume that the fused option required the respondent to be not merely fused but "special." First, we worried that the central positioning of the self circle within the country circle may have suggested that endorsers of the fused option perceived themselves as central to the functioning of the group. Second, given that the E option was more distant from the adjacent D option than any other pair of options were from each other (i.e., the distance from D to E was 0.64 cm; the distance between all other pairs was 0.32 cm), respondents may have decided that endorsers of the E option were quite unique.

To address these concerns, we introduced a modified version of the fusion scale that contained a sixth option in between the original D and E options. In the new E option, the center of the self circle resided in the left-hand portion of the group circle, only 0.32 cm from the center of the D circle. One hundred and fifty-one Spanish undergraduates (25 men, 126 women; mean age = 32.28 years, $SD = 8.83$) enrolled at UNED completed a survey online for class credit. In counterbalanced order, participants completed the measures of identity fusion and identification with the country. Participants then completed the measures of willingness to fight and die for the group (αs = .78 and .79, respectively).

We were interested in two comparisons: (a) the E and F options (fused) vs. the ABCD options (nonfused), and (b) the E versus F option. To make these comparisons simply and directly, we used an orthogonal coding method, the Helmert Contrast (West, Aiken, & Krull, 1996). The resulting multiple regression analysis of willingness to fight for the group included five predictors: two Helmert-coded main effects for fusion (the first of which compares the two fused groups with the nonfused groups, and the second of which compares the two fused groups with each other), identification (centered), and the interaction of identification with each of the two Helmert-coded effects of fusion.

The regression analysis on willingness to fight for the group revealed the predicted main effect of the first Helmert code, $\beta = -.30$, $t(145) = -3.58$, $p < .001$, such that those who endorsed the E and F options ($M = -1.68$, $SD = 1.22$, and $M = -1.31$, $SD = 1.59$, respectively) were more willing to fight than those who endorsed the nonfused options ($M = -2.46$, $SD = 0.79$). Also consistent with prediction, the regression showed no main effect of the second Helmert code, $\beta = -.10$, $t(145) = -1.39$, $p = .17$, indicating no difference between the E and F options. The analysis also yielded a marginal effect of identification, $\beta = .16$, $t(145) = 1.85$, $p < .07$. No significant interactions between identification and the fusion effects emerged.

A regression analysis of willingness to die for the group also indicated a main effect of the first Helmert code, $\beta = -.25$, $t(145) = -2.91$, $p < .004$, such that those who endorsed the E and F options ($M = -0.29$, $SD = 1.06$, and $M = -0.17$, $SD = 1.38$, respectively) expressed more willingness to die for the group than nonfused participants ($M = -1.23$, $SD = 1.29$). The regression also showed no effects of the second Helmert code, $\beta = -.02$, $t(145) = -0.30$, $p = .76$, indicating no difference between the E and F options. Finally, the analysis yielded a main effect of identification, $\beta = .25$, $t(145) = 2.99$, $p < .003$, but no significant interaction effects between identification and the fusion effects.

Study 5 tested our assumption that fusion is not a trait but instead captures people's sentiments toward a specific target group. Two hundred and fifty-one Spanish undergraduates (108 men, 143 women; mean age = 33 years, $SD = 11.34$) enrolled in UNED completed a survey online for class credit. In counterbalanced order, participants completed a measure of fusion with Spain as well as five other groups. Correlations between fusion with Spain and the other groups were all small and nonsignificant: friends, $r(249) = .10$; religion, $r(249) = -.01$; family, $r(249) = .03$; sport-team, $r(249) = -.08$; and political party, $r(249) = .02$. These findings suggest that our measure of fusion does not tap a trait. Rather, it appears that fusion is specific to the particular target toward which it is directed.

In summary, the results of the preliminary studies supported our assumption that fusion is a unique state of oneness with a group, a state that is categorically distinct from the state of nonfusion. In addition, fusion was related to verbal measures of identification, and it was fairly common for Spaniards to feel fused with their country. Furthermore, although fused participants did necessarily see themselves as central to the group, they believed that they were unique among group members in their willingness to act on behalf of the group. Finally, fusion was targeted toward specific groups rather than being a trait.

Having identified a measure of fusion that met our requirements, we conducted three experiments to test our major hypotheses. Using several procedural variations, we asked whether fused persons would be particularly inclined to endorse fighting and dying for their group when their chronic identities had been activated.

Experiment 1: Will a Challenge of a Personal Identity From an Ingroup Member Increase Extreme Pro-Group Behavior?

In this study, we either challenged or verified participants' negative personal identities and then measured their desire to fight and die for the group (Spain). The design was a 2 (fusion: fused vs. nonfused) × 2 (challenge of personal identities: verified vs. challenged) factorial.

To obtain evidence that the state of fusion would predict responses over time and avoid potential demand characteristics, we conducted this experiment (and the remaining experiments) in two waves. In the initial wave, we measured personal identities and the extent to which participants were fused with Spain. To ensure that increasing the salience of group membership would not contaminate responses to the measure of personal identities, we measured personal identities before the measures of fusion. To determine if the effects or our pictorial measure of fusion were distinct from those of identification and prototypicality, we also administered measures of both of these variables. The dependent measures were collected during the second wave of data collection several months later.

Method

Participants. Spanish undergraduates enrolled in UNED completed this research on the web for course credit. The experiment was conducted online in two waves separated by 4 to 5 months. There was relatively little attrition between the two waves, with 627 students completing the first wave and 602 participants (520 women, 82 men; mean age = 31.17 years, $SD = 7.45$) completing the second wave.

During the first wave, participants were asked to list five negative traits about themselves and then write a brief paragraph

describing behaviors that exemplified each of the five negative traits that they had listed (without naming the traits). A manipulation check indicated that they regarded the traits they listed as negative (i.e., below the midpoint on a scale ranging from −3 [*negative*] to 3 [*positive*]; $M = -1.67$, $SD = 0.45$), $t(601) = -91.19$, $ps < .001$). Participants also completed the identification and fusion scales for the group Spain, yielding 237 fused and 365 nonfused participants in the final sample. Finally, for the measure of self-perceived prototypicality, on scales ranging from 1 (*not at all*) to 10 (*very much*), participants responded to this question: "To what extent do you consider yourself a prototypical member of your group?"

During the second wave, participants returned to the website and completed a second series of questionnaires. They learned that another participant (whom we will dub the "evaluator") had read their self-descriptive paragraph and generated a list of negative traits that seemed to describe the participant. Participants were not given the specific traits generated by the evaluator but were told how the traits listed by the evaluator compared with the ones that the participant had listed during the first wave. Participants randomly assigned to the verified condition learned that the evaluator had correctly identified four of five of the (negative) traits that the participant had listed 4–5 months earlier but formed an overly positive evaluation of the remaining trait. Those randomly assigned to the challenge condition learned that the evaluator had correctly identified one of the five (negative) traits, but on the remaining four traits the evaluator rated perceived the participant more positively than the participant perceived him or herself. After participants received this feedback from the evaluator, they completed a manipulation check. Specifically, on scales ranging from 1 (*not at all*) to 10 (*extremely*), participants indicated the extent to which they believed that the evaluator saw them as they saw themselves. Finally, participants completed the measures of willingness to fight and die for the group ($\alpha s = .80$ and $.71$, respectively).

Checks on Our Manipulations and Measures

Was fusion correlated with identification and self-perceived prototypicality? In this experiment, the correlation between identification and fusion was moderate ($r = .35$). In support of our assumption that fused people perceive themselves as unique among group members, the correlation between fusion and prototypicality was negligible ($r = .05$, *ns*). However, in this experiment and subsequent experiments prototypicality was not correlated with identification (all $rs < .07$), raising the possibility that our single item measure of prototypicality was invalid.

Was the challenge manipulation effective? To determine if the challenge manipulation diminished participants' perception that the evaluator saw them as they saw themselves, we conducted a 2 (fusion: fused vs. non-fused) × 2 (challenge: verified vs. challenged) ANOVA. As expected, only a large main effect of the challenge manipulation emerged, $F(1, 598) = 149.31$, $p < .001$, $\eta^2 = .20$, such that participants were less apt to indicate the evaluator perceived them as they perceived themselves in the challenged as compared with verified condition ($M = 5.83$, $SD = 1.86$ vs. $M = 3.88$, $SD = 1.91$, respectively). No other effects emerged ($Fs < 1$).

Did fused participants list more qualities related to their Spanish national identity than nonfused participants during the first wave? If, during the first wave, fused participants were more apt to identify qualities that were related to their group identities than nonfused participants, then the challenge manipulation would have been more apt to activate the group identities of fused as compared with nonfused participants, which would represent a rival interpretation of our findings. Examination of the negative traits listed by fused versus nonfused participants during the first wave of the investigation offered no support for this rival hypothesis. For example, the five most commonly listed negative traits, and their rates of endorsement by fused and nonfused participants, respectively, were as follows: shy (57.4%, 57.1%), insecure (33.3%, 32.9%), stubborn (27.4%, 27.9%), nervous (18.5%, 19%), and distrustful (12.6%, 13.1%). Note also that none of these traits is closely linked to Spanish national identity, which emphasizes qualities such as unpunctual, unconcerned with the environment, and fast talking (e.g., Sangrador, 1996). Moreover, there was no difference between the fused and nonfused participants in the rate of endorsement of any of these traits (or the other 21 traits listed; all $ts < 1$, *ns*).

Results

To determine if fusion and challenge interactively predicted attempts to shore up participants' group identities, we performed a series of multiple regressions of the outcome variables. The predictors were identification, fusion, and challenge, all two-way interactions, and the triple interaction. Both fusion and challenge were dummy coded and, as suggested by Aiken and West (1991), identification was centered.

Willingness to fight for the group. Our major prediction was a significant interaction between the fusion and challenge variables. Just such an interaction emerged, $\beta = .17$, $t(594) = 3.29$, $p < .001$. Following the procedures recommended by Aiken and West (1991; see also West et al., 1996), we decomposed this interaction by creating a coding system. As shown in Figure 3, fused participants expressed more willingness to fight for the group in the challenge condition than in the verify condition, $\beta = .16$, $t(594) = 3.03$, $p < .003$. In contrast, among nonfused participants there was no difference between the challenge and verify conditions, $\beta = -.02$, $t(594) = -0.45$, $p = .65$.

There was also an interaction between identification and fusion, $\beta = .17$, $t(594) = 3.22$, $p < .001$, with identification exerting a stronger effect among fused persons ($\beta = .28$) than among nonfused persons ($\beta = .14$). The foregoing interactions qualified a main effect of fusion, $\beta = .13$, $t(594) = 3.07$, $p < .002$, such that fused participants were more willing to fight than nonfused participants ($M = -1.96$, $SD = 1.24$, and $M = -2.38$, $SD = .77$, respectively), and a main effect of identification, $\beta = .26$, $t(594) = 6.55$, $p < .001$, such that willingness to fight increased with identification. No other significant effects emerged from the analysis.

Willingness to die for the group. As in the willingness to fight data, the analyses revealed the predicted interaction between fusion and challenge, $\beta = .14$, $t(594) = 2.76$, $p < .006$. As can be seen in Figure 4, fused participants expressed more willingness to die for the group in the challenge condition than in the verify condition, $\beta = .14$, $t(594) = 2.64$, $p < .008$. No such difference
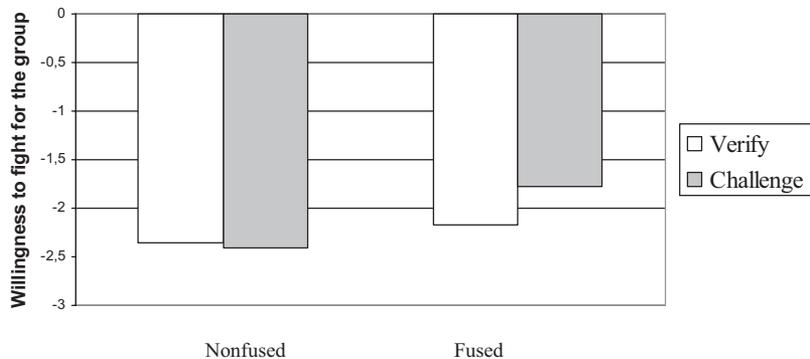
Figure 3. Study 1. Willingness to fight for the group.

emerged among nonfused participants, however, β = .001, $t(594) = -0.03$, $p = .98$.

The analysis also revealed a main effect of fusion β = .14, $t(594) = 3.23$, $p < .001$, with fused participants expressing more willingness to die than nonfused participants ($M = -0.67$, $SD = 1.48$, and $M = -1.26$, $SD = 1.33$, respectively). Identification also had a significant effect, β = .23, $t(594) = 5.85$, $p < .001$, indicating that higher identification was associated with more willingness to die for the group. No other significant effects emerged from the analysis.

Discussion

When participants who were fused with a group received non-verifying positive feedback about their personal identities, they were especially inclined to strive for verification of their group identities by expressing willingness to fight and die for their group. Presumably, challenging the validity of participants' personal identities triggered a desire to shore up these identities. Because the personal and social identities of fused people were functionally equivalent, they worked to shore up their social identities in the wake of a challenge to their personal identities.

Our evidence that fused participants engaged in compensatory activity in response to challenges to their personal identities is inconsistent with the notion that a depersonalization process diminishes the salience of personal identities when people enter groups (e.g., Turner et al., 1987). Nevertheless, the fact that the challenge manipulation ostensibly came from a member of an ingroup may appear to provide self-categorization theorists with a theoretical toe-hold for a rival interpretation of our findings. That is, encountering self-discrepant feedback from another ingroup member may have disputed our participant's assumption that self and other ingroup members are interchangeable and thus in agreement (e.g., Turner, 1991). Challenging feedback from an ingroup member may have thus created a tension that was subsequently resolved through displays of group loyalty. If so, then informing participants that the discrepant feedback came from an outgroup member should not trigger compensatory self-verification activities. Experiment 2 was designed to test this possibility.

Experiment 2: Will a Challenge of a Personal Identity From an Outgroup Member Increase Extreme Pro-Group Behavior?

This study was designed to determine if the findings of Experiment 1 would replicate if the challenging feedback came from a member of an outgroup (someone from another country in the European Union) rather than an ingroup. As in Experiment 1, the design for this experiment was a 2 (fusion: fused vs. nonfused) × 2 (challenge of personal identities: verified vs. challenged) factorial.
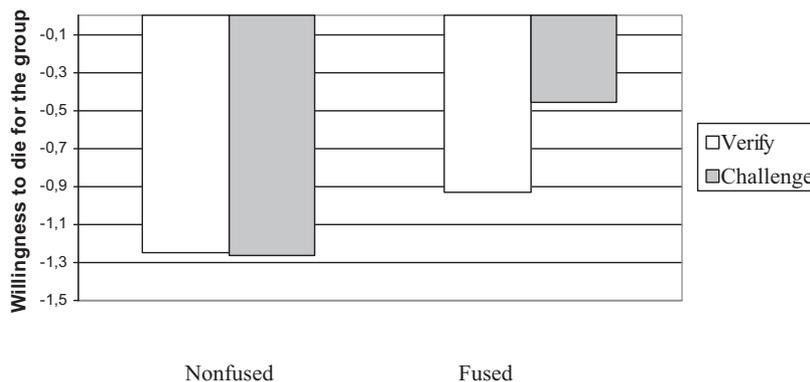

Figure 4. Study 1. Willingness to die for the group.

Method

Spanish students enrolled in UNED completed this research on the web for course credit. The experiment was conducted in two waves separated by 4 to 5 months, with 365 students completing the first wave and 326 participants (278 women, 48 men; mean age = 31.06 years, SD = 7.40) completing the second wave.

During the first wave, participants were asked to list five negative traits about themselves and then write a brief paragraph describing behaviors that exemplified each of the five negative traits that they had listed (without naming the traits). A manipulation check indicated that they regarded the traits they listed as negative (i.e., below the midpoint on a scale ranging from −3 [*negative*] to 3 [*positive*]; M = −1.68, SD = .43), $t(325)$ = 70.64, ps <.001.

The procedure used for the second wave of the experiment was virtually identical to that used in Experiment 1 except that the source of the feedback was a member of an outgroup rather than ingroup. We simply told participants that their answers would be randomly assigned to one evaluator who came from 1 of the 26 European countries but did not specify the country itself. As in the previous investigations, the fight and die variables were internally consistent, (αs = .73 and .75, fight and died, respectively).

To increase the credibility of the challenge manipulation, we asked participants if, in a future experiment, they would like to evaluate people from another European country. They then indicated their level of interest in being in this role on a scale ranging from 0 (*totally disagree*) to 6 (*totally agree*). A Fusion (fused vs. nonfused) × Challenge (verified vs. challenged) analysis of covariance (ANCOVA) of the interest variable with identification and perceived status of the country (the perceived status measure is described below) as the covariates showed no significant differences (ps > .20).

At no point did we tell participants which country the evaluator came from. When we asked participants what country they believed the evaluator was from, there was considerable variability. In all, they listed 23 of the 26 European countries, with the most cited being: France (13.8%), Greece (12.3%), Italy (12%), Portugal (11.3%), Belgium (11%), Germany (10.7%), the Netherlands (10.1%), and the United Kingdom (7.7%). Finally, on 7-point scales ranging from −3 (*totally disagree*) to 3 (*totally agree*), participants indicated their perceptions of the status of inhabitants of the country they chose relative to Spain by responding to the following query: "The general status of people from this country is higher than the general status of Spaniards."

Checks on Our Manipulations and Measures

Was fusion correlated with identification and self-perceived prototypicality? In this experiment, the correlation between identification and fusion was moderate (r = .44). The correlation between fusion and self perceived prototypicality was negligible (r = .03, *ns*).

Was the challenge manipulation effective? To determine if the challenge manipulation diminished participants' perception that the evaluator saw them as they saw themselves, we conducted a 2 (fusion: fused vs. nonfused) × 2 (challenge: verified vs. challenged) ANOVA. As expected, only a large main effect of the challenge manipulation emerged, $F(1, 322)$ = 103.22, p < .001,

η^2 = .24, such that participants were less apt to indicate the evaluator perceived them as they perceived themselves in the challenged as compared with verified condition (M = 6.01, SD = 1.80 vs. M = 3.81, SD = 2.09, respectively). No other effects emerged (Fs < 1).

Did fused participants list more qualities related to their Spanish national identity than nonfused participants during the first wave? Examination of the negative traits listed by fused versus nonfused participants during the first wave of the investigation offered no support for this rival hypothesis. That is, the five most commonly listed negative traits were the same five most-listed traits in Experiment 1. The rates of endorsement by fused and nonfused participants, respectively, were as follows: shy (53.25%, 51.42%), insecure (30.31%, 28.8%), stubborn (25.12%, 26.23%), nervous (21.1%, 20.19%), and distrustful (10.2%, 12.11%).

Results

To determine if fusion and challenge interactively predicted attempts to shore up participants' group identities, we performed a series of multiple regressions of the outcome variables in which the predictors were identification, fusion, and challenge, all two-way interactions, and the triple interaction. As in Experiment 1, both fusion and challenge were dummy coded and identification was centered.

Willingness to fight for the group. The analyses revealed the expected Fusion × Challenge interaction, β = .27, $t(318)$ = 3.14, p < .002. As shown in Figure 5, fused participants expressed more willingness to fight for the group in the challenge condition than in the verify condition, β = .29, $t(318)$ = 4.91, p < .001, but nonfused participants were not influenced by the challenge manipulation, β = −.01, $t(318)$ = −.09, p = .93.

The analyses also revealed an Identification × Fusion interaction, β = .11, $t(318)$ = 2.29, p < .023, such that identification had a stronger effect among fused persons (β = .16, p < .039) than among nonfused persons (β = .10, p = .20). The foregoing interactions qualified a main effect of fusion, β = .39, $t(318)$ = 7.71. p < .001, with fused participants indicating more willingness to fight than nonfused participants (M = −1.88, SD = 1.02, and M = −2.55, SD = .43, respectively). There was also a main effect of the challenge manipulation, β = .15, $t(318)$ = 3.02, p < .003, such that participants in the challenge condition were more willing to fight than those in the verify condition (M = −2.09, SD = .93, and M = −2.32, SD = .76). No other significant effects emerged.

Willingness to die for the group. As predicted, there was an interaction between fusion and challenge, β = .20, $t(318)$ = 2.33, p < .02. As shown in Figure 6, fused participants expressed more willingness to fight for the group in the challenge condition than in the verify condition, β = .22, $t(318)$ = 3.66, p < .001, but the challenge manipulation had no impact on nonfused participants, β = −.01, $t(318)$ = −0.08, p = .94.

The analyses also revealed an Identification × Fusion interaction, β = .12, $t(318)$ = 2.33, p < .02, such that identification had a stronger effect among fused persons (β = .13, p < .085) than among nonfused persons (β = .09, p = .27). There was also a main effect of fusion, β = .42, $t(318)$ = 8.46, p < .001, with fused participants indicating more willingness to die than nonfused participants (M = −0.43, SD = 1.24, and M = −1.47, SD = .095, respectively). There was also a main effect of the challenge ma-
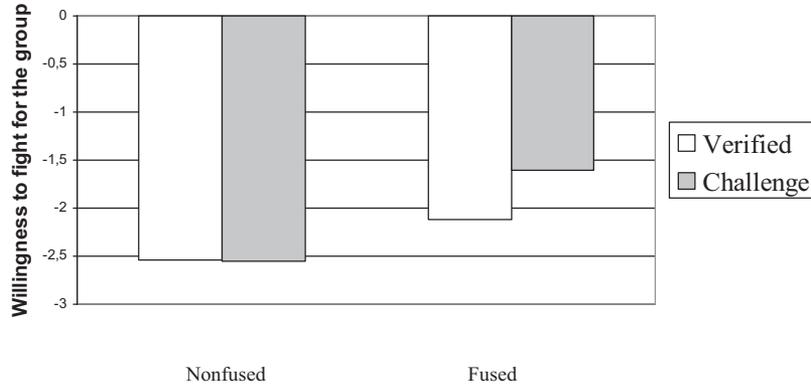
Figure 5. Study 2. Willingness to fight for the group.

nipulation, $\beta = .27$, $t(318) = 2.25$, $p < .025$, with participants in the challenge condition expressing more willingness to die than participants in the verify condition ($M = -0.83$, $SD = 1.26$, and $M = -1.06$, $SD = 1.17$, respectively). No other significant effects emerged.

Discussion

As in Experiment 1, when participants who were fused with a group learned that an evaluator evaluated their personal flaws and limitations positively, they were especially inclined to strive for verification of their group identities by expressing willingness to fight and die for their group. Moreover, the fact that the challenge manipulation ostensibly came from a member of an outgroup argues against the notion that the feedback triggered more endorsement of extreme behavior because it contradicted the assumption that self and other group members are interchangeable and thus in agreement (e.g., Turner, 1991).

If the personal and social identities of fused persons are functionally equivalent, as our formulation suggests, then activating either the personal or social identities of such individuals should have the same effect. To test this possibility as well as the generality of our fusion effects, we conducted a third experiment.

Experiment 3: Is Activating the Personal Identities of Fused People Functionally Equivalent to Activating Their Social Identities?

To test the generality of our fusion effects, we used a new strategy for activating identities in this experiment. Specifically, we introduced an identity activation manipulation that did not entail providing participants with feedback. Instead, in one condition, we activated participants' personal identities by having them indicate their willingness to fight for themselves. In a second condition, we activated participants' social identities by having them indicate their willingness to fight for their group. Control participants received no additional activation manipulation. The design was therefore a 2 (fusion: fused vs. nonfused) $\times$ 3 (identity activation: personal, social, no-activation-control) factorial.

If the personal and social identities of fused participants are functionally equivalent, then activating either type of identity should increase the tendency of fused participants to endorse extreme behavior relative to controls. In addition, because focusing attention on identities tends to increase the certainty with which they are held (e.g., Briñol, Petty, Gallardo, 2007), activating either the personal or social identities of fused participants should increase the certainty of their personal identities relative to con-
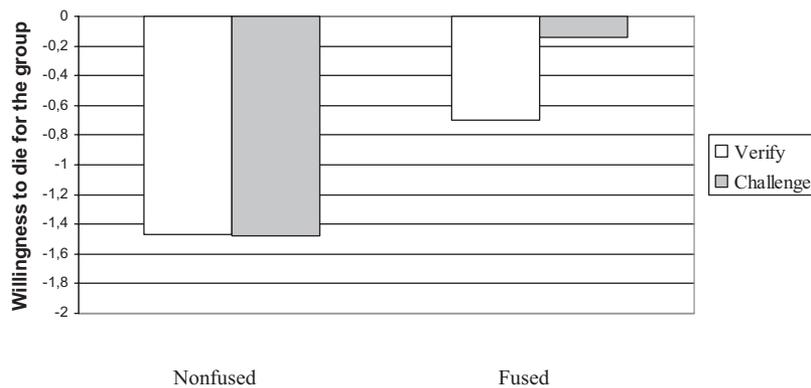

Figure 6. Study 2. Willingness to die for the group.

trols. Finally, activating the social identities of nonfused participants should increase their endorsement of extreme behavior relative to controls, but activating their personal identities should produce no such increase.

Method

Participants. Spanish high school students taking a psychology class volunteered to participate in this research with their own consent and that of their parents. The experiment was conducted in two waves separated by 10 days. There was little attrition between the two waves, with 435 students completed the first wave and 421 participants (369 girls, 52 boys; mean age = 15.81 years, SD = 0.92) completing the second wave.

To make the procedure as comparable as possible to that used in the first two experiments, we first had participants complete the procedure used in the challenge conditions of Experiments 1 and 2. Participants were asked to list five negative traits about themselves and then write a brief paragraph describing behaviors that exemplified each of the five negative traits that they had listed (without naming the traits). A manipulation check indicated that the traits were perceived as significantly more negative than the middle point of the scale (0), $M = -1.63$, $SD = 0.47$, $t(420) = -70.91$, $p < .001$, and these perceptions were not associated with our independent variables. Participants also completed measures of the certainty that they possessed each of the five traits, identification ($\alpha = .88$), fusion for the group Spain, and prototypicality.

During the second wave, we first provided participants with feedback regarding their personal identities using the same procedure used in Experiment 1 except that all participants received feedback that challenged their negative identities (i.e., positive feedback). After participants received the feedback, they indicated the extent to which the evaluator saw them as they saw themselves. A 2 × 3 ANOVA revealed no main nor interaction effects of the independent variables, $Fs(1, 415) < 0.19$, $ps > .83$, $\eta^2s < .001$.

Participants were randomly assigned to one of three groups: personal identity activation, social identity activation, and control. Participants in the personal identity activation condition were asked about what they would do for themselves on a five-item scale adapted from the willingness to fight for the group scale: for example, "I would fight someone physically threatening me." Participants in the social identity activation condition were asked to indicate what they would do for the group on the willingness to fight for the group scale included in the previous experiments. Participants in the control condition proceeded directly to completing the dependent measures.

The dependent measures were identical to those included in the previous studies except that we deleted the measures of fight for the group (as these items had already been used in the social self-activation condition) and added measures of the certainty of identities and perception of uncertainty reduction. For the measure of certainty of personal identities, participants rated the extent to which they were certain that each of the five negative traits used in the feedback manipulation described them. They completed this measure twice, once at the end of Wave 1 and once again after the identity activation manipulation in Wave 2. We computed an index of certainty change by subtracting average certainty before the manipulation from average certainty after the manipulation.

Checks on Our Manipulations and Measures

Was fusion correlated with identification and self-perceived prototypicality? In this experiment, the correlation between identification and fusion was moderate ($r = .26$), and the correlation between fusion and self-perceived prototypicality was negligible ($r = .04$, ns).

Did fused participants list more qualities related to their Spanish national identity than nonfused participants during the first wave? Examination of the negative traits listed by fused versus nonfused participants during the first wave of the investigation offered no support for this rival hypothesis. That is, four of the five most commonly listed negative traits were the same five most-listed traits in Experiments 1 and 2. The rates of endorsement by fused and nonfused participants, respectively, were as follows: shy (42.16%, 41.40%), insecure (37.25%, 38.26%), nonconformist, (31,16%, 30,68%), stubborn (18,16%, 16.13%), and nervous (13.11%, 12.88%).

Results

To determine if fusion and self-view activation interactively predicted attempts to shore up participants' group identities, we performed a series of multiple regressions of the outcome variables. The fusion variable was dummy coded, identification was centered, and two orthogonal contrasts were created for the identity activation variable. The first orthogonal contrast compared the control group with the mean of personal and social identity activation conditions ($-2, 1, 1$). The second orthogonal contrast compared the personal identity activation condition with the social identity activation condition ($0, 1, -1$; see West et al., 1996).

Willingness to die for the group. We expected that fusion would interact with the identity activation manipulation such that, among fused participants, both the personal and social identity activation conditions would express more willingness to die than control participants, but that no such differences would emerge among nonfused participants. Our second prediction was that fused participants would respond similarly in the personal and social identity activation conditions, but that nonfused participants would express more willingness to die for the group in the social identity activation condition than in the personal identity activation condition. To test these predictions, we conducted multiple regressions in which the predictors were identification (centered), fusion (dummy coded), identity activation (orthogonally coded), and all interactions between these predictors.

To test for the predicted interaction between identity activation and fusion, we compared the regression model with all predictors with a second model that excluded the interactions between fusion and the two orthogonal codes. This comparison revealed an Identity Activation × Fusion interaction, $F(2, 411) = 4.50$, $p < .01$. This overall interaction was partially due to an interaction between the first orthogonal contrast and fusion, $\beta = -.11$, $t(409) = -1.97$, $p < .05$, indicating that the difference between the control condition and the mean of personal and social identity activation conditions varied as a function of fusion. As can be seen in Figure 7, among fused participants, those in both the personal and social identity activation were more willing to die than control participants, but no such pattern emerged among nonfused. The analysis also showed an interaction between the second orthogonal contrast
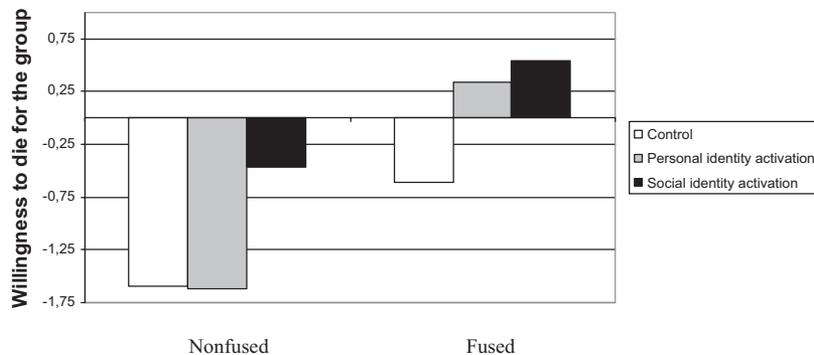
Figure 7. Study 3: Willingness to die for the group.

and fusion, $\beta = .16$, $t(409) = 3.04$, $p < .003$, such that the difference between the personal and the social identity activation conditions varied as a function of fusion. As is shown in Figure 7, fused participants responded similarly in the personal identity and the social identity activation conditions but nonfused participants expressed more willingness to die for the group in the social identity activation condition than in the personal identity activation condition.

The foregoing interactions qualified three main effects. First, there was a main effect of fusion, $\beta = .44$, $t(409) = 10.26$, $p < .001$, such that fused persons expressed more willingness to die than nonfused. Second, there was a main effect of the first orthogonal contrast, $\beta = -.18$, $t(409) = -3.16$, $p < .002$, indicating that willingness to die was higher in the two experimental conditions than the control conditions. Third, there was a main effect of the second orthogonal contrast, $\beta = -.31$, $t(409) = -5.74$, $p < .000$, indicating that willingness to die was greater in the social identity activation condition than in the personal identity activation condition. There were no main nor interactive effects of identification.

Besides confirming our primary hypothesis, the data also made three additional points. First, the fact that activating the social identities of nonfused participants raised their willingness to die to the levels of fused participants in the control condition indicates that contextual variables (i.e., activation of social self-view) as well as individual difference variables (i.e., fusion) can contribute to extreme behavior. Second, willingness to die for the group exceeded the mean of the scale among some participants in this study. This finding fits with pilot testing indicating that the younger participants (as in Experiment 3) tend to endorse higher rates of fighting and dying for the group than older participants (as in Experiments 1 and 2).

Third, our methods and results undermine a rival explanation that assumes that the identity activation manipulation simply primed violence. Witness, for example, that the manipulation simply asked a question, which means that for the many participants who answered nonviolently it primed nonviolence rather than violence. Also, the priming hypothesis predicts that among nonfused participants, those in the personal self-view activation condition should have endorsed more extreme behavior than those in the control condition, but they did not. Finally, if the identity activation manipulation merely primed violence, it should have

had no tendency to increase self-certainty. We test this possibility in the next section.

Did activating personal or social identities increase the certainty of fused participants' personal selves? We expected that fused participants would display high certainty of their personal identities during Wave 2 (controlling for certainty at during Wave 1) when either their personal or social identities were activated. At the same time, among nonfused participants, we expected high levels of certainty of personal self-views during Wave 2 only when their personal identities had been activated. Just such a pattern of results emerged. A 2 (fusion: fused vs. nonfused) $\times$ 3 (identity activation: personal vs. social vs. control) ANCOVA of certainty of personal self during Wave 2, with certainty of self-views during Wave 1 as the covariate,[5] revealed the predicted Fusion $\times$ Identity Activation interaction, $F(2, 414) = 19.49$, $p < .001$, $\eta^2 = 10$. As can be seen in Figure 8, among fused participants, those in the personal and social identity activation conditions expressed greater self-view certainty, $t(130) = 7.63$, $p < .01$, and $t(127) = 8.05$, $p < .001$, respectively, than participants in the control condition. However, no difference was produced between the personal and social identity activation conditions, $t(107) = 1.29$, $p = .20$. In contrast, among nonfused participants, those in the personal identity activation condition displayed higher certainty than participants in the control and the social identity activation conditions, $t(161) = -8.63$, $p < .001$, and $t(155) = -7.65$, $p < .001$, respectively. Nonfused participants in the control condition did not differ from their counterparts in the social identity activation condition ($t < 1$). The interaction qualified main effects of fusion, $F(1, 414) = 35.31$, $p < .001$, $\eta^2 = .10$, and activation manipulation, $F(2, 414) = 51.47$, $p < .001$, $\eta^2 = .23$. The covariate had no effect ($F < 1$).

In addition to confirming recent evidence that focusing on the self increases self-certainty (Briñol et al., 2007), the self-certainty findings also support our hypothesis that the personal and social identities are functionally equivalent among fused people. That is, for fused participants (but not nonfused participants), focusing on the social self was just as effective in raising the certainty of

---

[5] A *t* test with certainty during the first wave as the dependent variable revealed no effect of fusion ($t < 1$, $M = 6.84$, $SD = 1.72$ vs. $M = 6.76$, $SD = 1.64$, $t < 1$).
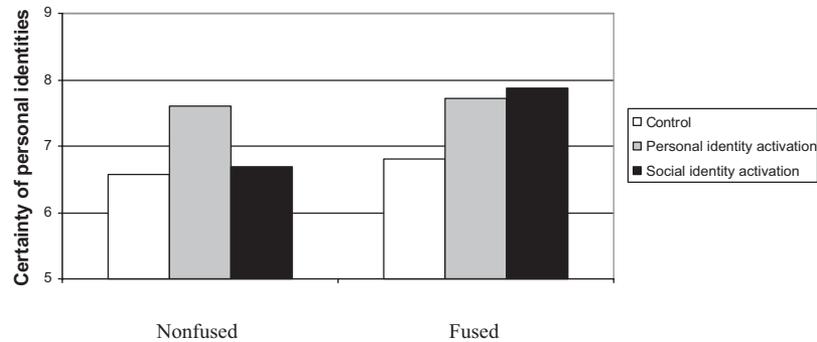
Figure 8. Experiment 3: Certainty of personal identities.

personal identities as focusing on the personal self. Finally, these data offer direct support for our assumption that the identity activation manipulations did indeed activate the self. This finding cannot be explained by the rival hypothesis that the identity activation manipulations merely served to prime violence. As such, this finding casts further doubt on the viability of this rival explanation.

Discussion

In this study, an entirely different identity activation manipulation (having people indicate how willing they were to defend themselves or their group) increased willingness to die for the group. These findings provided further support for our assumption that the personal and social identities of fused people are functionally equivalent. That is, activating either the personal or social identities of fused persons increased their willingness to die for the group as well as their desire for group identity verification. Furthermore, activating social as well as personal identities served to increase the certainty of participants' personal identities.

General Discussion

We proposed that the personal as well as social self may energize group-related behavior. To test this idea, we focused on fused persons, that is, group members who were so thoroughly enmeshed with the group that they felt uniquely responsible to act on its behalf. The results revealed that activating either the personal or social identities of fused persons increased their willingness to endorse extraordinary behaviors such as fighting or dying for the group. This pattern appeared to be robust, in that it emerged in two preliminary studies and three experiments that used different methodologies (questionnaire and web based), age groups (high school students and adults), and periods of time between collection of predictors and outcome measures (4–5 months vs. 10 days). Together, these findings support our assumption that the personal identities of fused people remain salient when they enter groups and that their personal and social identities are functionally equivalent.

Our evidence that group members value verification of their social as well as personal identities complements recent findings reported by Chen and her colleagues (Chen et. al., 2004; Chen, Boucher & Tapias, 2006). Whereas she found that people seek verification of collective identities (personal identities associated with group membership), our evidence was consistent with the notion that people sought verification of their group identities (beliefs about the characteristics of the group). Our findings also dovetail with Lemay and Ashmore's (2004) evidence that people failed to assimilate evaluations that challenged their group identities.

To the best of our knowledge, our experiments represent the first empirical demonstrations of a link between extreme group behavior and people's enduring personal identities. Indeed, Hogg (2007) seems to have offered the only other account of the potential role of the personal self in extreme behavior. Hogg has speculated that people are drawn to extreme groups because such groups offer clear and sharply drawn answers to individuals whose self-certainty has been challenged. His hypothesis, which has not yet been tested empirically to the best of our knowledge, deals with a phenomenon that is distinct from ours. For example, in contrast to our focus on the propensity to engage in extreme behavior, Hogg considers the factors that cause people to enter extreme groups. Moreover, contrary to our contention that the presence of firmly held identities motivates extreme behavior, Hogg has proposed that identities that are weak and uncertain (at least temporarily) trigger identification with extreme groups.

One challenge for future researchers will be to identify the precise mechanisms underlying the effects of our manipulations. A rival explanation of the results of the first two experiments is that challenging fused people with positive feedback emboldened them to say that they would fight and die for the group. Examination of the specific positive feedback in the challenge manipulation (e.g., *secure*, *calm*, *flexible*, and *trustful*), however, suggests that the manipulation would have encouraged less rather than more extreme behavior. Moreover, nothing in this rival hypothesis indicates why positive feedback failed to embolden nonfused participants to endorse extreme behaviors in Experiments 1 and 2. Finally, in Experiment 3, the manipulation of personal identity and social identity increased endorsement of dying for the group beyond the mere reception of positive feedback. That said, the fact that the procedure used in Experiment 3 included both the manipulation of positive feedback as well as the personal identity activation manipulation leaves open the possibility that the two manipulations may have interactively produced our findings.

In what follows, we consider the implications of our findings for several related theories in social psychology. We begin with two

theories that have dominated the study of group relations for the last several decades.

Social Identity and Self-Categorization Theory

To date, most analyses of group processes have been guided by either social identity theory (e.g., Tajfel & Turner, 1979) or self-categorization theory (e.g., Turner, Oakes, Haslam, & McGarty, 1994). Our findings are generally consistent with some aspects of these theories. For example, the fact that identification predicted endorsement of extreme behaviors in some of our studies is consistent with social identity theorists' emphasis on the importance of identification with the group. More important, our findings confirm the notion that social identities can have a powerful impact on group-related behavior, even when that behavior (e.g., dying for the group) is not in the individual's self-interest.

These overlapping themes notwithstanding, we believe that our findings suggest a fundamentally different understanding of the interplay of personal and social identities than the one advanced in the original statements of social identity and self-categorization theory. For example, consider Turner et al.'s (1987) principle of functional antagonism, which holds that increases in the salience of any given identity diminishes the salience of other identities. Our evidence that activating the personal identities of fused people increased their endorsement of extreme group-related behavior suggests that personal and social identities can be simultaneously active (e.g., Simon, 2004). Similarly, evidence that activating the social identities of fused people increased the certainty of their personal identities in Experiment 3 provides further evidence that the two types of identities may complement rather than compete with one another. Some of our other findings call into question the generality of the depersonalization process (Turner et al., 1987). That is, the fact that fused people insisted that they would do more for the group than other group members indicates that such individuals do not perceive themselves as interchangeable with other group members.

Advocates of social identity and self-categorization theory will be quick to point out that we are not the first to question the generality of the principle of functional antagonism (e.g., Abrams, 1994; Baray, G., Postmes, T., & Jetten, in press; Pickett, Silver, & Brewer, 2002; Postmes & Jetten, 2006; Reid & Deaux, 1996; Stephenson, 1981; Turner, Reynolds, Haslam, & Veenstra, 2006) or the depersonalization process (e.g., Deaux, 1993; Simon, 2004; Spears, 2001). Nevertheless, acknowledging that these key theoretical propositions are not universally applicable does not change the fact that such propositions remain default assumptions of the theories. As such, these assumptions continue to orient researchers who use the theory. Perhaps this explains why researchers working in this tradition have failed to propose and empirically test a conceptualization that predicts the specific conditions under which personal versus social identities motivate group behavior. This was the goal of this report. Drawing on self-verification theory (Swann, 1983), we predicted and found that the personal and social identities of fused persons acted in a complementary manner. In particular, manipulations that were designed to activate either the personal or social identities of fused people increased their subsequent willingness to engage in extreme behavior for the group. No such pattern emerged among nonfused persons.

Social identity theorists may also be tempted to characterize fusion as nothing more than "identification plus," "identification with a dash of commitment," or a subscale of Luhtanen and Crocker's (1992) collective self-esteem scale. It is certainly possible that some combination of verbal items might tap into the same perception of oneness that the fusion scale measures with a single item (e.g., Cameron, 2004; Leach et al., 2008). Nevertheless, even if this were true, we would be reluctant to view fusion as a variant of identification because to do so might obscure the distinct theoretical assumptions that underlie the identification and fusion constructs. On the one hand, identification is associated with self-categorization theory, which posits that a depersonalization process ensures when people join groups. If so, added commitment would simply make a highly identified person more inclined to embrace the group prototype, a tendency that is unlikely to foment extraordinary action on behalf of the group. Thus, the "identification plus" characterization of fusion is undermined by our evidence that fused persons were more apt to endorse extreme group-related behavior than nonfused persons.

On the other hand, we assume that people can become fused with a group without forfeiting their personal identities. For this reason, fused persons should be quite capable of acting in ways that diverge from the group prototype. Consistent with this reasoning, our fused participants seemed compelled by a motivationally potent personal self to "go above and beyond the call of duty" (e.g., Codol, 1975) and endorse fighting and dying for the group.

From this perspective, the primary contribution of this report is not a methodological one centered on the refinement of a pictorial measure of identification. Instead, our primary contribution is conceptual: Introducing a distinctive form of allegiance to groups called fusion. The fusion construct assumes that group-related behavior may be motivated by both the personal and social self. In particular, personal and social identities may combine synergistically to complement and reinforce, rather than compete with, one another. The result is extreme behavior on behalf of the group.

Our findings are also relevant to Abrams & Hogg's (1988) contention that people enter groups that are viewed both positively and distinctively as a means of bolstering their feelings of self-worth (e.g., but see Turner & Reynolds, 2001). Support for this self-enhancement assumption has come from dozens of demonstrations of a strong *ingroup bias*, a tendency for group members to favor their own group (e.g., Brewer & Kramer, 1985; Dutton, Dukerich, & Harquail, 1994; Fuller, Barnett, Hester, & Relyea, 2003). It is difficult to see how self-enhancement strivings could explain our findings. That is, consistent with self-verification theory, we discovered that participants sought to shore up their group identities in response to positive feedback that challenged their negative personal identities. If anything, it would seem that challenging participants' negative identities would be self-enhancing and should therefore diminish the tendency of people to work to shore up their group membership.

The unique contributions of our approach notwithstanding, it is possible to find considerable common ground between elements of our perspective and some recent work in the social identity theory tradition. For example, akin to self-verification theory's assumption that identities provide people with a sense of coherence, some social identity theorists have recently emphasized the role that identities play in making sense of the world (e.g., Ellemers & van Knippenberg, 1997; Reynolds, Turner, & Haslam, 2000; Turner,

1999). Other researchers have shown that people who identify themselves as having low status embrace these negative identities (e.g., Spears, Jetten, & Scheepers, 2002). From this vantage point, it is not surprising that the more people face discrimination, the more they emphasize that devalued identity (Branscombe, Schmitt, & Harvey 1999; Jetten, Branscombe, Schmitt, & Spears 2001). The latter finding nicely confirms self-verification theory's (Swann, 1983) prediction that as people gather more support for a self-view, that self-view grows in certainty and the desire to verify that self-view increases accordingly. Considered together, these formulations converge in suggesting that although people may prefer to think well of themselves in an ideal world, they are at least, if not more, concerned with coming to terms with who they really are and structuring their lives accordingly (e.g., Spears, et. al., 2002).

Optimal Distinctiveness Theory

Optimal distinctiveness theory suggests that humans are of two minds when it comes to groups. Just as they have an inherent drive to affiliate with others, they also have an opposing drive for individuation (Brewer, 1991). The task of the individual is to somehow strike a balance between these competing motivations by finding a point of *optimal distinctiveness*, an identity that simultaneously addresses both affiliation and individuation needs. This approach shares our assumption that group members remain interested in being individuated and attaining verification of their personal identities while at the same time wishing to affiliate with the group. We would suggest further, however, that people may affiliate (at least in part) as a means of obtaining verification for their identities. From this perspective, the need for affiliation may be an outgrowth of desires to communicate, and receive verification for, their individual identities.

Self-affirmation theory. As noted earlier, Fein and Spencer (1997) have reported support for self-affirmation theory's prediction that people work to maintain their sense of positive self-worth (Steele, 1988). In particular, they found that people responded to challenges to their positive identities by derogating a member of a stereotyped group. In the tradition of self-verification theory, we obtained support for the symmetric prediction that people would fend off challenges to their negative identities, precisely the opposite dynamic documented in the Fein and Spencer research. This finding suggests that Fein and Spencer's findings may have turned on a tendency for most people in unselected samples to have high self-esteem. From this vantage point, what appeared to be self-affirmation strivings may have in reality reflected self-verification strivings. Further research is needed to test this possibility directly.

Extremist groups. Our focus on extreme behavior raises the question of the relationship of our findings to the activities of members of extremist groups. Some superficial similarities are worth noting. For example, our major finding was that fused people were more inclined to endorse extreme behavior such as fighting and dying for their group. Moreover, fused persons felt that they were willing to do more for their group than other group members. And when asked how they felt about their country, our fused participants reported that they perceived Spain to be good, right, and morally superior to other groups—sentiments that are often expressed by members of extremist organizations (e.g., Crenshaw, 2000; Smith, 2004).

Beyond these superficial similarities, we acknowledge a host of important differences. For one thing, the rates at which our participants endorsed fighting and dying for the group were below the theoretical mean of the scale for adults and only slightly above the mean for high school students—a finding that is not surprising given that our participants were ordinary Spaniards. There are many reasons to suspect that these rates would be higher among members of terrorist organizations or other extreme groups. Consider that members of extremist organizations may routinely be besieged with encouragement to engage in engage in self-sacrifice and other forms of pro-group behavior. In contrast, ordinary citizens are likely to encounter such appeals only when a serious threat to the unity of the group is perceived, as in the case of a clear risk of secession of Basques and Catalans in present-day Spain. Nevertheless, when the conditions are right, it seems reasonable to expect that fused participants would support extreme political measures including military actions or being active in extreme groups. Indeed, in some instances, such individuals may come to construe their own extreme pro-group behaviors as the ultimate expression of their own personal need to differentiate from other group members (e.g., Codol, 1975).

Conclusions

We sought to develop a deeper understanding of the interplay of the personal and social self in extreme group behavior. To begin to fill this gap in the literature, we drew on both social identity theory (Tajfel & Turner, 1979) and self-verification theory (Swann, 1983). Whereas social identity theory offers a rich framework for understanding the role of the social self in group contexts, self-verification theory offers insights into the role of the personal self in such contexts. We discovered that activating either personal or social identities of people who were fused with their group increased the extent to which they were willing to fight or even die for the group. Thus, even when people become deeply aligned with a group, their personal identities remain potent.

Our findings challenge the notion that extreme behaviors grow out of a chronically weak or wavering sense of self (e.g., Kaplan, 1981; Post, 1984). To the contrary, in our research, participants were most apt to endorse extreme behavior when they were strongly aligned with the group and had recently received feedback that challenged their chronic beliefs about themselves. From this vantage point, extreme behavior did not stem from a lack of self-knowledge. Rather, extreme behavior grew out of people's efforts to maintain their convictions about themselves.

At a more general level, our findings speak to the recent debate between advocates of the importance of the personal versus social self. One side of the debate has contended that the personal self is primary over the social self (e.g., Gaertner, Sedikides, Vevea, & Iuzzini, 2002). The other side has countered that personal identities are impotent constructions that are "there to be explained, not in themselves explanations" (Turner et al., 2006, p. 25). Our evidence that both the personal and social identities of group members remain salient and active among group members will hopefully refocus this debate. Clearly, both personal and social identities are important and influential. The issue, therefore, is not to determine which form of identity is bigger. Rather, the critical issue is to identify the personal and situational factors that determine how the two types of identities interactively guide behavior.

References

Abrams, D. (1994). Social self-regulation. *Personality and Social Psychology Bulletin, 20,* 473–483.

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.* Newbury Park, CA: Sage.

Aron, A., Aron, E., & Smollan, D. (1992). Inclusion of Other in the Self Scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology, 63,* 596–612.

Baray, G., Postmes, T., & Jetten, J. (in press). When "I" equals "We": Exploring the relation between social and personal identity of extreme right-wing political party members. *British Journal of Social Psychology.*

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.

Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin, 17,* 475–482.

Brewer, M. B. (1999). The psychology of prejudice: Ingroup love or outgroup hate? *Journal of Social Issues, 55,* 429–444.

Brewer, M. B., & Kramer, R. M. (1985). The psychology of intergroup attitudes and behavior. *Annual Review of Psychology, 36,* 219–243.

Briñol, P., Petty, R. E., & Gallardo, I. (2007). The effect of self-affirmation in nonthreatening persuasion domains: Timing affects the process. *Personality and Social Psychology Bulletin, 33,* 1533–1546.

Burke, P. J., & Stets, J. E. (1999). Trust and commitment through self-verification. *Social Psychology Quarterly, 62,* 347–360.

Cameron, J. E. (2004). A three-factor model of social identity. *Self & Identity, 3,* 239–262.

Cast, A. D., & Burke, P. J. (2002). A theory of self-esteem. *Social Forces, 80,* 1041–1068.

Chen, S., & Boucher, H. C., & Tapias, M. P. (2006). The relational self revealed: Integrative conceptualization and implications for interpersonal life. *Psychological Bulletin, 132,* 151–179.

Chen, S., Chen, K. Y., & Shaw, L. (2004). Self-verification motives at the collective level of self-definition. *Journal of Personality and Social Psychology, 86,* 77–94.

Coats, S., Smith, E. R., Claypool, H. M., & Banner, M. J. (2000). Overlapping mental representations of self and in-group: Reaction time evidence and its relationship with explicit measures of group identification. *Journal of Experimental Social Psychology, 36,* 304–315.

Codol, J. P. (1975). On the so-called superior conformity of the self behaviour: Twenty experimental investigations. *European Journal of Social Psychology, 5,* 457–501.

Cooley, C. S. (1902). *Human nature and the social order.* New York: Scribner's.

Crenshaw, M. (2000). The psychology of terrorism: An agenda for the 21st century. *Political Psychology, 21,* 405–420.

Deaux, K., (1993). Reconstructing social identity. *Personality and Social Psychology Bulletin, 19,* 4–12.

De La Ronde, C., & Swann, W. B., Jr. (1998). Partner verification: Restoring shattered images of our intimates. *Journal of Personality and Social Psychology, 75,* 374–382.

Deschamps, J. C. (1982). Différentiation entre soi et autrui et entre groupes. In J. P. Codol & J. P. Leyens (Eds.), *Cognitive analysis of social behaviour.* The Hague: Nijhoff.

Dutton, J. E., Dukerich, J. M., & Harquail, C. V. (1994). Organizational images and member identification. *Administrative Science Quarterly, 39,* 239–263.

Ellemers, N., & van Knippenberg, A. (1997). Stereotyping in social context. In R. Spears, P. J. Oakes, N. Ellemers, & S. A. Haslam (Eds.), *The social psychology of stereotyping and group life* (pp. 208–235). Malden, MA: Blackwell.

Fein, S., & Spencer, S. (1997). Prejudice as self-image maintenance: Affirming the self through derogating others. *Journal of Personality and Social Psychology, 73,* 31–44.

Fuller, J. B., Barnett, T., Hester, K., & Relyea, C. (2003). A social identity perspective on the relationship between perceived organizational support and organizational commitment. *The Journal of Social Psychology, 143,* 789–791.

Gaertner, L., Sedikides, C., Vevea, J. L., & Iuzzini, J. (2002). The "I," the "We," and the "When": A meta-analysis of motivational primacy in self-definition. *Journal of Personality and Social Psychology, 83,* 574–591.

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., & Hardie, E. A. (1991). Social attraction, personal attraction and self-categorization: A field study. *Personality and Social Psychology Bulletin, 17,* 175–180.

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,* 1204–1213.

Jones, S. C. (1973). Self and interpersonal evaluations: Esteem theories versus consistency theories. *Psychological Bulletin, 79,* 185–199.

Kaplan, A. (1981). The psychodynamics of terrorism. In Y. Alexander & J. Gleason (Eds.), *Behavioral and quantitative perspectives on terrorism* (pp. 35–50). New York: Pergamon.

Klar, Y., & Giladi, E. E. (1997). No one in my group can be below the group's average: A robust positivity bias in favor of anonymous peers. *Journal of Personality and Social Psychology, 73,* 885–901.

Leach, C. W., Zomeren, M. V., Zebel, S., Vliek, M. L. W., Ouerkerk, J. W., & 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,* 144–165.

Lemay, E. P., & Ashmore, R. D. (2004). Reactions to perceived categorization by others during the transition to college: Internalizaton of self-verification processes. *Group Processes & Interpersonal Relations, 7,* 173–187.

London, M. (2003). Antecedents and consequents of self-verification: Implications for individual and group development. *Human Resource Development Review, 2,* 273–293.

Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin, 18,* 302–318.

Mael, F. A., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior, 13,* 103–123.

Mead, G. H. (1934). *Mind, self and society.* Chicago: University of Chicago Press.

Murray, S. L., Holmes, J. G., Dolderman, D., & Griffin, D. W. (2000). What the motivated mind sees: Comparing friends' perspectives to married partners' views of each other. *Journal of Experimental Social Psychology, 36,* 600–620.

Pickett, C. L., Silver, M. D., & Brewer, M. B. (2002). The impact of assimilation and differentiation needs on perceived group importance and judgments of ingroup size. *Personality and Social Psychology Bulletin, 28,* 546–558.

Polzer, J. T., Milton, L. P., & Swann, W. B., Jr. (2002). Capitalizing on diversity: Interpersonal congruence in small work groups. *Administrative Science Quarterly, 47,* 296–324.

Post, J. (1984). Notes on a psychodynamic theory of terrorist behavior. *Terrorism: An International Journal, 7,* 241–256.

Postmes, T., & Jetten, J. (2006). *Individuality and the group: Advances in social identity.* Thousand Oaks, CA: Sage.

Reid, A., & Deaux, K. (1996). Relationship between social and personal identities: Segregation or integration? *Journal of Personality and Social Psychology, 71,* 1084–1091.

Reynolds, K. J., Turner, J. C., & Haslam, A. (2000). When are we better than them and they worse than us? A closer look at social discrimination in positive and negative domains. *Journal of Personality and Social Psychology, 78,* 64–80.

Ritts, V., & Stein, J. R. (1995). Verification and commitment in marital relationships: An exploration of self-verification theory in community college students. *Psychological Reports, 76,* 383–386.

Sageman, M. (2004). *Understanding terror networks.* Philadelphia: University of Pennsylvania Press.

Sangrador, J. (1996). *Identidades, actitudes y estereotipos en la España de las autonomías.* Madrid: Centro de Investigaciones Sociológicas.

SAS Institute. (1999). SAS OnlineDoc®, Version 8 [Computer software]. Cary, NC: SAS Institute.

Schafer, R. B., Wickrama, K. A. S., & Keith, P. M. (1996). Self-concept disconfirmation, psychological distress, and marital happiness. *Journal of Marriage and the Family, 58,* 167–177.

Schubert, T., & Otten, S. (2002). Overlap of self, ingroup, and outgroup: Pictorial measures of self-categorization. *Self & Identity, 1,* 535–576.

Simon, B. (2004). *Identity in modern society: A social psychological perspective.* Oxford, UK: Blackwell.

Smith, A. G. (2004). From words to action: Exploring the relationship between a group's value references and its likelihood of engaging in terrorism. *Studies in Conflict and Terrorism, 27,* 409–437.

Smith, E. R., & Henry, S. (1996). An in-group becomes part of the self: Response time evidence. *Personality and Social Psychology Bulletin, 22,* 635–642.

Spears, R. (2001). The interaction between the individual and the collective self: Self-categorization in context. In C. Sedikides & M. B. Brewer (Eds.), *Individual self, relational self, and collective self: Partners, opponents or strangers?* (pp. 171–198). Philadelphia, PA: Psychology Press.

Spears, R., Jetten, J., & Scheepers, D. (2002). Distinctiveness and the definition of collective self: A tripartite model. In A. Tesser, J. V. Wood, & D. A. Stapel (Eds.), *Psychological perspectives on self and identity* (Vol. 2, pp. 147–171). Lexington: APA.

Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the integrity of the self. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 21, pp. 261–302). New York: Academic Press.

Stephenson, G. M. (1981). Intergroup bargaining and negotiation. In J. C. Turner & H. Giles (Eds.), *Intergroup behaviour* (pp. 168–98). Oxford, UK: Blackwell.

Swann, W. B., Jr. (1983). Self-verification: Bringing social reality into harmony with he self. In J. Suls & A. G. Greenwald (Eds.), *Psychologycal perspectives on the self* (Vol. 2, pp. 33–66). Hillsdale, NJ: Erlbaum.

Swann, W. B., Jr., De La Ronde, C., & Hixon, J. G. (1994). Authenticity and positivity strivings in marriage and courtship. *Journal of Personality and Social Psychology, 66,* 857–869.

Swann, W. B., Jr., & Hill, C. A. (1982). When our identities are mistaken: Reaffirming self-conceptions through social interaction. *Journal of Personality and Social Psychology, 43,* 59–66.

Swann, W. B. Jr., Kwan, V. S. Y., Polzer, J. T., & Milton, L. P. (2003). Capturing the elusive "value in diversity" effect: Individuation, self-verification and performance in small groups. *Personality and Social Psychology Bulletin, 29,* 1396–1406.

Swann, W. B., Jr., Milton, L. P., & Polzer, J. T. (2000). Should we create a niche or fall in line? Identity negotiation and small group effectiveness. *Journal of Personality and Social Psychology, 79,* 238–250.

Swann, W. B. Jr., Polzer, J. T., Seyle, C., & Ko, S. (2004). Finding value in diversity: Verification of personal and social identities in diverse groups. *Academy of Management Review, 29,* 9–27.

Swann, W. B., Jr., & Read, S. J. (1981). Self-verification processes: How we sustain our self-conceptions. *Journal of Experimental Social Psychology, 17,* 351–372.

Swann, W. B., Jr., Wenzlaff, R. M., & Tafarodi, R. W. (1992). Depression and the search for negative evaluations: More evidence of the role of self-verification strivings. *Journal of Abnormal Psychology, 101,* 314–371.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks-Cole.

Tropp, L. R., & Wright, S. C. (2001). Ingroup identification as the inclusion of ingroup in the self. *Personality and Social Psychology Bulletin, 27,* 585–600.

Turner, J. C. (1991). *Social influence.* Milton Keynes, UK: Open University Press.

Turner, J. C. (1999). Some current issues in research on social identity and self categorization theories. In. N. Ellemers, R. Spears, & B. Doosje (Eds.), *Social identity: Context, commitment, content* (pp. 6–34). Oxford, UK: Blackwell.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory.* New York: Blackwell.

Turner, J. C., Oakes, P. J., Haslam, S. A., & McGarty, C. (1994). Self and collective: Cognition and social context. *Personality and Social Psychology Bulletin, 20,* 454–463.

Turner, J. C., & Reynolds, K. J. (2001). The social identity perspective in intergroup relations: Theories, themes and controversies. In R. Brown & S. Gaertner (Eds.), *Handbook of social psychology. Vol 4: Intergroup processes* (pp. 133–152). Oxford, England: Blackwell.

Turner, J., Reynolds, K. J., Haslam, A., & Veenstra, K. E. (2006). Reconceptualizing personality: Producing individuality by defining the personal self. In T. Postmes & J. Jetten (Eds.), *Individuality and the group: Advances in social identity* (pp. 11–36). Thousand Oaks, CA: Sage.

West, S. G., Aiken, L. S., & Krull, J. L. (1996). Experimental personality designs: Analyzing categorical by continuous variable interactions. *Journal of Personality, 64,* 1–48.