

# When Group Membership Gets Personal: A Theory of Identity Fusion

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Identity fusion is a relatively unexplored form of alignment with groups that entails a visceral feeling of oneness with the group. This feeling is associated with unusually porous, highly permeable borders between the personal and social self. These porous borders encourage people to channel their personal agency into group behavior, raising the possibility that the personal and social self will combine synergistically to motivate pro-group behavior. Furthermore, the strong personal as well as social identities possessed by highly fused persons cause them to recognize other group members not merely as members of the group but also as unique individuals, prompting the development of strong relational as well as collective ties within the group. In *local fusion*, people develop relational ties to members of relatively small groups (e.g., families or work teams) with whom they have personal relationships. In *extended fusion*, people project relational ties onto relatively large collectives composed of many individuals with whom they may have no personal relationships. The research literature indicates that measures of fusion are exceptionally strong predictors of extreme pro-group behavior. Moreover, fusion effects are amplified by augmenting individual agency, either directly (by increasing physiological arousal) or indirectly (by activating personal or social identities). The effects of fusion on pro-group actions are mediated by perceptions of arousal and invulnerability. Possible causes of identity fusion—ranging from relatively distal, evolutionary, and cultural influences to more proximal, contextual influences—are discussed. Finally, implications and future directions are considered.

*Keywords:* identity fusion, social identity, personal identity, group identification, self-verification

I am what I am because of who we all are.

—Characterization of the African philosophy *Ubuntu*  
by Leymah Gbowee

I'd actually throw myself on the hand grenade for them . . . because I actually love my brothers. I mean, it's a brotherhood . . . Any of them would do it for me.

—Reflections of an American soldier in Afghanistan  
(Sebastian Junger, *War*)

Every day, some people do extraordinary things for their social groups: They risk their lives in combat; they donate their personal fortunes; they even blow themselves up. In this article, we propose that a common mechanism—identity fusion—underlies each of these extreme sacrifices for one's group. We assume that identity fusion is a unique form of alignment with a group, one that entails a visceral feeling of oneness with the group. This feeling of oneness is associated with increased permeability of the boundary between the personal and social self. Such elevated permeability will increase the likelihood that the fused person's personal identity will influence his or her group identity and vice versa. This article focuses on these mutual influence processes. More broadly, we consider the nature and consequences of identity fusion, its relationship to other forms of alignment with groups, and the variables that cause it and regulate its expression. To place the identity fusion construct in historical context, we briefly introduce its intellectual ancestors.

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## Intellectual Roots of Identity Fusion Theory: From Durkheim to the Social Identity Perspective

Fusion-like constructs have a long history in the behavioral sciences. Examples include the following: Emile Durkheim's (1893/1964, 1915/1995) concept of "mechanical solidarity" and "collective effervescence," Victor Turner's (1969) notion of "spontaneous communitas" (an intense feeling of togetherness and common humanity), Alan Fiske's (1991) notion of communal

sharing (see also Sahlins, 1974), and Harvey Whitehouse's (1995) depiction of the "imagistic" mode of religiosity. In the contemporary psychological literature, fusion's closest intellectual cousin is "group identification" (Lewin, 1948).

Researchers typically understand identification to reflect people's feelings of allegiance to the collective (for other conceptualizations, see Brewer & Gardner, 1996; Postmes, Haslam, & Swaab, 2005; Prentice, Miller, & Lightdale, 1994). This understanding is derived from what is known as the "social identity perspective," which encompasses social identity theory (e.g., Tajfel & Turner, 1979) and its extension, self-categorization theory (e.g., J. C. Turner, Oakes, Haslam, & McGarty, 1994). Over the last three decades, the social identity perspective has shaped almost all major theorizing regarding group processes (for recent examples, see Ellemers, De Gilder, & Haslam, 2004; Ellemers, Spears, & Doosje, 2002; S. A. Haslam, Reicher, & Platow, 2011; Hornsey & Jetten, 2004; Mackie, Devos, & Smith, 2000; Mackie, Smith, & Ray, 2008; E. R. Smith, Seger, & Mackie, 2007; Spears, Oakes, Ellemers, & Haslam, 1997).

At the heart of the social identity perspective lays the distinction between the personal and social self (e.g., James, 1890; Tajfel & Turner, 1979). Whereas the personal self refers to idiosyncratic properties of the individual (e.g., "intelligent," "sociable"), the social self refers to those aspects of self associated with group membership (e.g., "Democrat," "American"). This distinction gives rise to several assumptions, three of which are especially relevant here. First, social identity theory proposes that all interactions with others are located on an interpersonal–intergroup continuum (Tajfel & Turner, 1979). This implies that insofar as group-related behavior is motivated by a salient social self, it will not be motivated by a salient personal self, and vice versa. For example, when an individual's social identity as a saleswoman is salient and influential, her personal identity as shy will recede and be less influential. Self-categorization theory (J. C. Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) expanded upon this idea by hypothesizing a hydraulic relationship between the social and personal self—the "functional antagonism principle." Social identity approaches therefore suggest that the motivational burden for pro-group behavior rests entirely on the shoulders of the relevant social identity (see Hopkins et al., 2007; Levine & Crowther, 2008).

Second, when social identity is salient and group members define themselves in terms of their social identity, they will "depersonalize"—that is, perceive themselves and other group members as categorically interchangeable. This means that group members will perceive other group members through the lens of their membership in the group rather than in terms of personal relationships that they have established with one another. Further, their attraction to fellow group members will be determined by the degree to which such members embody the prototypic characteristics of the group (i.e., depersonalized attraction) rather than their possession of appealing personal qualities (i.e., interpersonal attraction; Hogg, 1993). Considerable evidence suggests that depersonalized attraction rather than interpersonal attraction fosters group identification (Hogg & Hardie, 1991) and perceptions of group cohesiveness (Hogg, Cooper-Shaw, & Holzworth, 1993; Hogg & Hains, 1996).

Third, even though there are individual differences in the extent to which social categories or group memberships are salient (i.e., perceiver readiness; see J. C. Turner et al., 1987), identification as a group member is presumably regulated by the social context. As a result, changes in the context could produce substantial changes in levels of identification (J. C. Turner, 1999; J. C. Turner et al., 1994).

In recent years, theorists have revisited some of the foregoing assumptions. Whereas some have questioned the generality or interpretation of the principle of functional antagonism (e.g., Abrams, 1994; Baray, Postmes, & Jetten, 2009; Pickett, Silver, & Brewer, 2002; Postmes & Jetten, 2006; Reid & Deaux, 1996; Stephenson, 1981; see also J. C. Turner, Reynolds, Haslam, & Veenstra, 2006), others have contested the depersonalization hypothesis (e.g., Deaux, 1993; Simon, 2004; Spears, 2001). Moreover, although all theorists acknowledge that allegiance to the collective provides the basis for identification, some have contended that the personal relationships of group members may also promote identification (e.g., Brewer & Gardner, 1996; Postmes et al., 2005; Prentice et al., 1994). Still others have challenged the notion that identification typically fluctuates markedly in response to contextual changes, suggesting instead that it may be temporally stable among some individuals (e.g., Roccas, Sagiv, Schwartz, Halevy, & Eidelson, 2008).

Fusion theory integrates all of these revisionist themes by considering new ways in which the personal and social selves of group members may relate to one another. In particular, whereas most people experience clearly demarcated boundaries between their personal and social selves, those who are highly fused with a group experience this boundary as porous and permeable. We consider the implications of these porous boundaries next.

### Nature of Identity Fusion

Identity fusion occurs when people experience a visceral feeling of oneness with a group. The union with the group is so strong among highly fused persons that the boundaries that ordinarily demarcate the personal and social self become highly permeable. In fact, these boundaries become so permeable that aspects of both the personal and social self can readily flow into the other. The flow of influence may move in both directions: Just as highly fused persons come to view themselves through their group membership ("My group membership is a crucial part of who I am"), they also perceive the group through their personal self ("I am an important part of the group"). These mutual influence processes encourage a strong sense of connection to the group, a sense that motivates highly fused persons to do as much for the group as they would do for themselves. Nevertheless, such mutual influence processes do not necessarily diminish the integrity of either the personal or social self. Instead, just as heavy commerce between trading partners does not necessarily diminish the integrity of either country, the connections between the personal and social self do not undermine—and may actually increase—the strength and viability of both constructs.

The tendency for highly fused persons to maintain permeable borders between their personal and social selves will not only magnify their feelings of connectedness to the group category, it will also foster connections to other ingroup members. That is, highly fused persons may project their own strong personal and

social selves onto other group members. This will introduce the possibility of attraction to other group members based on the unique personal selves of these members as well as their membership in the group. Group members may accordingly develop strong relational ties to other group members. With such strong relational ties will come a sense of obligation to help and defend fellow group members. Moreover, just as highly fused persons will be inclined to believe that they themselves will do anything for the group and its members, they will project their feelings of personal agency onto others. As a result, they will develop the conviction that other group members are similarly disposed to protect the group and its individual members. This assumption that other group members are also extraordinarily committed to the group and its individual members will foster the perception of reciprocal strength, wherein highly fused individuals will perceive that the group is not only extremely powerful, but invulnerable due to the combined effect of personal and group agency.

In short, the state of identity fusion refers to a powerful union of the personal and social self wherein the borders between the two become porous without diminishing the integrity of either construct. The result is a powerful feeling of connectedness, not only to the group category but also to the other members of the group. These feelings of connectedness, in turn, foster strong relational ties to other group members and the perception of reciprocal strength. This reasoning gives rise to the four principles of identity fusion discussed below. These principles capture the most important ways that fusion is distinct from previous forms of alignment with groups, such as identification.

1. *Agentic-personal-self principle.* One distinction between identification and fusion involves the role of the agentic-personal-self in pro-group behavior. The social identity perspective holds that when a social identity is salient, the actions of highly identified persons are regulated by a “depersonalized” social self associated with the group; feelings of *personal* agency presumably play no role in pro-group activities. In contrast, when people fuse with a group, they do not temporarily abdicate their personal self. Rather, when highly fused persons enact pro-group activity, their actions reflect both their personal and social identities, working together by virtue of the porous borders that define them. This motivational dynamic increases the chances that such individuals will tether their feelings of personal agency to the group’s agendas. It will also introduce the possibility of synergistic relations between the personal and social selves of highly fused persons.

2. *Identity synergy principle.* Because group behavior is presumably fueled exclusively by social selves (e.g., J. C. Turner et al., 1987), personal selves contribute minimally to pro-group behavior. In contrast, the identity synergy principle holds that the personal and social identities of highly fused persons may combine synergistically to motivate pro-group behavior, thereby producing additional motivational “oomph.” The *identity synergy* principle also suggests that it should be possible to amplify pro-group behavior among highly fused persons by activating either their personal or social self-views. That is, due to the porous boundaries between the personal and social self of such individuals, activating either one will activate the other, thereby promoting activities that are emblematic of the individual’s commitment to the group. The

result will be that highly fused persons are unusually willing to engage in pro-group behavior.

3. *Relational ties principle.* For highly identified individuals whose group memberships are salient, other group members are mere carriers of information regarding what the group stands for (e.g., the norms of the group). Moreover, attraction to other group members is based only on the degree to which group members embody the prototypic qualities of the group. In contrast, as noted above, highly fused persons possess strong personal as well as social identities and tend to assume that others do as well. Highly fused persons will thus be predisposed to recognize the unique personal identities as well as social identities of fellow group members, allowing for “uniqueness-based” as well as “membership-based” attraction (akin to Hogg’s interpersonal and depersonalized attraction, respectively; see Hogg, 1993; Hogg et al., 1993; Hogg & Hardie, 1991).<sup>1</sup> The combination of membership-based and uniqueness-based attraction may produce exceptionally strong relational ties: Other ingroup members will not only be valued by virtue of their representativeness of the group (prototypicality for the group), they will also be valued for their unique personal characteristics that make them attractive relationship partners.

The strong relational ties associated with fusion may play out differently depending on whether fusion is local versus extended. In *local fusion*, group members form relational ties with others with whom they have direct personal contact and thus have the opportunity to share experiences. This commonly occurs in tribal units, small bands of teammates or soldiers, and other close-knit groups. In *extended fusion*, people may project the relational ties normally associated with local fusion onto large groups despite having little or no direct contact or shared experiences with individual members. Due to the lack of personal contact with all other group members, the “relational ties” that people develop with other group members are metaphorical rather than literal. Members of a given ethnicity, for example, may fuse with ethnically similar members of nation states (e.g., Spain, China) based on common ancestry, despite having few or no shared experiences with all of them. Alternatively, people may fuse with groups on the basis of an abstraction, such as a common cause or important value. Whatever form fusion takes, the relational ties principle raises the possibility that the *intra-psychic* synergies of individual highly fused persons may combine with *interpersonal* synergies wherein highly fused persons encourage other group members to enact pro-group behavior. The result of such encouragement may be the enactment of unusually bold and potentially dangerous actions on behalf of the group.

4. *Irrevocability principle.* Highly identified persons should remain devoted to the group only insofar as the immediate contextual influences support such devotion; removal of contextual support for identification may therefore produce corresponding

<sup>1</sup> In the interest of theoretical precision, we have replaced Hogg’s terms “depersonalized” and “interpersonal” attraction, with “uniqueness-based” and “membership-based,” respectively. Based on fusion theorizing, valuing group members because they are group members does not imply that we perceive them as less “person-like” (i.e., depersonalized), and valuing others for their unique qualities by definition is not more “interpersonal” than valuing them as a group member.

diminutions in identification. By contrast, once fused, people will tend to remain fused. One reason for this is the relational ties principle, which introduces the possibility that actual or imagined relational bonds to other group members—in addition to devotion to the collective—will buttress feelings of fusion. For example, fused people may develop close relationships with other group members who support and thus stabilize their feelings of alignment with the group. Furthermore, the exclusivity of fusion (i.e., people tend to fuse with only one group within a given group category, such as nation or religion; Swann, Gómez, Seyle, Morales, & Huici, 2009) will encourage fused people to sever, or refrain from cultivating, alignments with other groups, thereby diminishing their alternatives to the fused group. In this way, their powerful alignment with the group will lock highly fused persons into self-perpetuating interpersonal cycles that stabilize the very psychological structures that drew them into their groups in the first place.

Finally, the porous borders between the personal and social selves of highly fused individuals will mean that both types of identities support the allegiance that highly fused persons feel toward the group. Such allegiance may be particularly important when people encounter some threat to their personal or social identities. That is, as we note below (e.g., Gómez, Morales, Hart, Vázquez, & Swann, 2011; Swann et al., 2009), when highly fused individuals encounter challenges to their personal or social identities, their desire for stable self-views may trigger compensatory self-verification strivings (Swann, 2011). These compensatory activities will reaffirm the identities that have been challenged and thus shore up the feelings of fusion that they support. Together with the relational ties and exclusivity tendencies noted above, these compensatory activities may encourage people who become fused to remain fused.

### Empirical Research on Identity Fusion

Several studies have been conducted to test the viability of the four principles of fusion theory. To set the stage for these studies, researchers developed and validated two measures of fusion. We summarize this validation work prior to describing tests of the four principles.

#### Developing and Validating Measures of Identity Fusion

The goal of this work was to develop instruments that could identify participants who felt so strongly unified with a social group that the boundaries between their personal and social selves were highly permeable. To accomplish this aim, researchers began by modifying an existing pictorial methodology that had been developed to assess attachment in close relationships: the Inclusion of Other in the Self Scale (IOS; Aron, Aron, & Smollan, 1992; Aron, Aron, Tudor, & Nelson, 1991; see also Cialdini, Brown, Lewis, Luce, & Neuberg, 1997; Maner et al., 2002). Comprised of a series of pictures that represent different degrees of overlap between the self and other, the IOS was conceptualized as a measure of closeness to another person, the degree to which people possess a “sense of being interconnected with another.” Such interconnectedness theoretically entails a tendency to view the self as “including resources, perspectives, and characteristics of the

other” (Aron et al., 1992, p. 598). Several group researchers (Coats, Smith, Claypool, & Banner, 2000; E. R. Smith & Henry, 1996; Tropp & Wright, 2001) adapted the IOS to capture alignment of respondents with groups. Building on this work, Schubert and Otten (2002) added an option in which the self and group were completely overlapping. Swann et al. (2009) further modified the pictorial measure by asking respondents to indicate which of five representations of the self and group best captured their relationship with the group. Importantly, in the pictorial measure of identity fusion displayed in the top panel of Figure 1, the pictorial representation of the personal self remained visible despite being completely merged with the group.

Scores on the pictorial measure of fusion were distributed bimodally, with “fused” persons selecting the most extreme option in which the circle representing the “self” was completely immersed in the larger circle representing the “group.” Non-fused persons selected the other four options. The tendency for people to fuse with a particular group was fairly stable over time ( $r = .56$ ; Gómez, Brooks, et al., 2011). Nevertheless, fusion resembles an attitude rather than a trait in that the tendency to fuse with one group (e.g., one’s religion) was uncorrelated with the tendency to fuse with other groups (e.g., one’s country; all  $r$ s < .11,  $n$ s). The group-specificity of fusion presumably reflects a tendency for significant emotional commitments to a given group to preclude equally significant commitments to rival groups.

In over a dozen studies, the pictorial measure of fusion successfully predicted endorsement of pro-group behaviors such as fighting and dying for one’s country (e.g., Gómez, Brooks, et al., 2011; Swann et al., 2009). Moreover, in several variations of the classic trolley dilemma, highly fused persons (but not non-highly fused persons) endorsed saving fellow group members by plunging themselves in front of a speeding locomotive (Swann, Gómez, Dovidio, Hart, & Jetten, 2010). All of these findings emerged while controlling for group identification. Furthermore, Swann, Gómez, Huici, Morales, and Hixon (2010) reported that although fusion was closely associated ( $B = 0.53, p = .001$ ) with a measure of commitment (Rusbult & Farrell, 1983), fusion was a stronger predictor of endorsement of extreme actions for Spain than commitment,  $z = 5.99, p = .001, B$ s = 0.71 and 0.36, respectively,  $p$ s = .001.

Yet, if the strong track record of the pictorial measure of fusion supported the adage “a picture is worth a thousand words,” it was unfortunately unclear precisely which “words” participants had in mind when they endorsed the fused option. To address this shortcoming, Gómez, Brooks, et al. (2011) developed and validated the verbal measure of identity fusion displayed in the bottom panel of Figure 1. They began by assuming that the porous boundaries between the personal and social selves among highly fused persons would give rise to two complementary aspects of fusion. The first aspect of fusion involved feelings of connectedness or “oneness” with the group. To assess these feelings of connectedness, the researchers included items such as the “I am one with my country,” and “I feel immersed in my country” (see the bottom panel of Figure 1). The second aspect of fusion involved the perception that the group member makes the group strong and the group makes the person strong. To measure this reciprocal strength aspect of identity fusion, the researchers included items such as “I am strong because of my country,” and “I make my country strong.”



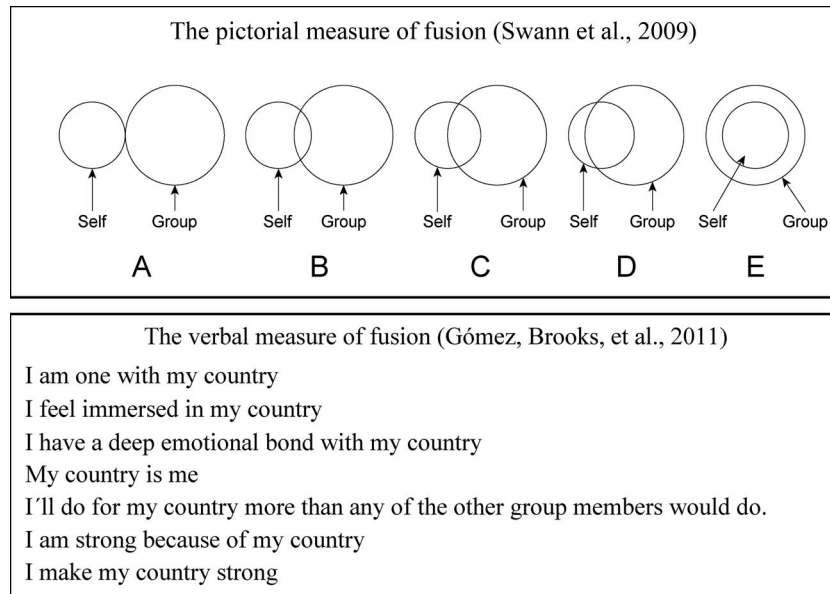


Figure 1. Measures of fusion pictorial (top panel; Swann et al., 2009) and verbal (bottom panel; Gómez, Brooks, et al., 2011).

Analysis of English and Spanish language versions of the 7-item fusion scale indicated that it had desirable psychometric properties. For example, a factor analysis revealed that all items loaded on a single factor and that the coefficient  $\alpha$  was .84. The test–retest correlation over a 6-month period was respectable,  $r(618) = .71$ ,  $p < .001$ , exceeding the stability of the pictorial measure of fusion,  $r(618) = .56$ ,  $p < .001$ ,  $z = 4.16$ ,  $p < .001$ —in turn, the test–retest stability of the pictorial fusion scale exceeded the stability of Mael and Ashforth's (1992) identification scale,  $r(618) = .44$ ,  $z = 2.82$ ,  $p < .01$ . More important, scores on the verbal measure of fusion were closely associated with scores on the pictorial measure of fusion, with disattenuated correlations ranging from .87 to 1.0.<sup>2</sup>

Gómez, Brooks, et al. (2011) also assessed the discriminant validity of the verbal measure of identity fusion. For example, they tested the hypothesis that fusion is related to, but distinct from group identification, the standard measure of alignment with groups. As an index of identification, the researchers focused on Mael and Ashforth's (1992) well-respected and widely cited scale. There were two reasons for choosing this scale. First, earlier research (Swann et al., 2009) indicated that Mael and Ashforth's scale was more strongly associated with fusion,  $r(198) = .56$ ,  $p < .01$ , than either of two rival scales: Jetten, Branscombe, Schmitt, and Spears's (2001) scale,  $r(112) = .26$ , and Tropp and Wright's (2001) scale,  $r(248) = .23$ . Second, in head-to-head competition with Leach et al.'s (2008) recently developed scale, Mael and Ashforth's scale was the stronger predictor of endorsement of extreme pro-group behavior (Swann, Gómez, Huici, et al., 2010). This evidence suggests that of extant identification scales, Mael and Ashforth's scale is the one that predicts extreme pro-group behavior with the most fidelity, making it the most appropriate standard of comparison with the fusion scale.

Psychometric analyses supported the distinction between the fusion and identification scales. For example, exploratory factor analysis of all items from the identity fusion scale and Mael and

Ashforth's (1992) scale revealed two factors, with the first factor including the seven items from the verbal measure of fusion and a second factor including the six items from the identification scale (Gómez, Brooks, et al., 2011, p. 922). Confirmatory factor analysis based on an independent sample verified the two-factor solution (Gómez, Brooks, et al., 2011, Figure 1, p. 923).

To further assess the convergent and discriminant validity of the verbal measure of fusion, Gómez, Brooks, et al. (2011) related scores on the scale to scores on several other scales that were, or were not, expected to be related to fusion. As noted above, the verbal measure of fusion was strongly correlated with the pictorial measure of fusion when the correlations were disattenuated. At the same time, fusion was *unrelated* to several potentially related personality attributes. Analyses revealed that scores on the verbal measure of fusion were unrelated to individual differences in self-concept clarity, empathy, or aggressiveness. Weak relations emerged between fusion and both self-efficacy and essentialism ( $r_s < .18$ ). These findings are important because they suggest that the substantial temporal stability of scores on the verbal measure of fusion does not reflect a tendency for it to masquerade as one of the foregoing traits.

Having established the convergent and discriminant validity of the verbal measure of fusion, Gómez, Brooks, et al. (2011) next conducted a series of tests of its predictive validity. Considerable

<sup>2</sup> Correlations between the verbal and pictorial measures of fusion are available from six samples (three different subject populations completed the measures several months apart). The correlations (ranging from .52 to .67) were attenuated by the fact that one of the covariates (i.e., the pictorial measure) was a single-item scale, and such scales are known to be notoriously unreliable. Consistent with this possibility, when we corrected the correlation between the two scales for attenuation (using test–retest coefficients as our index of reliability), the disattenuated values ranged from .87 to 1.0.

support emerged. For example, when scores on the fusion scale were used to predict endorsement of fighting and dying for one's group 6 months later, the verbal measure of fusion predicted the outcome variables with greater fidelity than the pictorial measure of fusion as well as a measure of identification (Gómez, Brooks, et al., 2011, Study 5 and Study 7b). In addition, the verbal measure of fusion outstripped its rivals in predicting the likelihood that participants would endorse jumping to their deaths in front of a speeding trolley to save a fellow group member (Study 6a) or kill terrorists who threatened the group (Study 6b). Finally, whereas the foregoing studies were conducted with Spaniards, additional studies validated the verbal measure of fusion with two samples of immigrants from 22 different nations (Studies 7a and 7b) as well as a sample of Americans who completed an English language version of the scale (Study 8).

These findings therefore led to two important conclusions. First, the verbal measure of fusion was closely associated with the pictorial measure of fusion. Second, on all indices of construct validity, the verbal measure of fusion exceeded the pictorial measure of fusion, and the pictorial measure, in turn, exceeded the identification scale. These findings set the stage for a program of research designed to determine whether indices of fusion behaved in accord with the four principles of fusion theory.

### The Agentic-Personal-Self principle

Insofar as highly fused individuals are poised to channel their feelings of agency into pro-group behavior, any manipulation that increases agency should theoretically increase pro-group behavior. One of the most direct ways to increase agency is to increase autonomic arousal through various activities such as physical exercise (Jacobs & Farel, 1971).

To test the proposed link between autonomic arousal and pro-group activity among highly fused persons, researchers conducted four experiments in which they experimentally induced physiological arousal by having participants either operate an exer-cycle, run wind sprints, or play dodge ball. As expected, increases in arousal amplified the tendency for highly fused persons to translate their feelings of fusion into pro-group behavior, including overt behaviors such as motor activity (i.e., racing a group-related avatar) or donating personal funds to a needy group member. Moreover, perceptions of agency mediated the interactive effects of arousal and fusion on pro-group behavior (Swann, Gómez, Huici, et al., 2010). An independent investigation replicated this mediational evidence by confirming that agency mediated the impact of fusion on endorsement of pro-group behavior (Gómez, Brooks, et al., 2011).

### Identity Synergy Principle

One set of tests of the identity synergy principle drew upon a paradigm developed by researchers interested in self-verification theory (Swann, 1983, 2011). The theory assumes that people have a deep need for social relations that are coherent, predictable, and devoid of conflict and misunderstanding. They accordingly develop a preference for others to see them as they see themselves, even if their self-views happen to be negative. Moreover, feedback that challenges their negative (or positive) self-views will trigger

compensatory efforts to reaffirm these self-views. Thus, for example, when people learn that others do not see them as they see themselves, they compensate by working to bring that person to view them as they view themselves—even when this entails lowering an interaction partners' overly *positive* evaluation of a negative quality (e.g., Brooks, Swann, & Mehta, 2011; Swann & Hill, 1982; Swann & Read, 1981; Swann, Wenzlaff, & Tafarodi, 1992).

If challenges to personal self-views trigger compensatory reactions, and the boundaries between the personal and social self-views of highly fused persons are highly permeable, then challenges to either their personal or social identities should amplify pro-group behavior. To test this hypothesis, researchers first challenged the personal self-views of fused and non-highly fused persons by providing them with unexpectedly positive feedback about personal qualities (of course, providing participants with unexpectedly *negative* feedback should also trigger compensatory activity, but such activities could reflect either self-verifying or self-enhancement motivations, an ambiguity that the investigators sought to avoid). After the challenge manipulation, the researchers assessed the degree to which participants endorsed pro-group behaviors. As predicted, challenging participants' personal self-views increased subsequent endorsement of pro-group activity among highly fused persons but not among non-highly fused persons (Swann et al., 2009, Experiments 1 and 2).

Apparently, the desire of highly fused persons (but not non-highly fused persons) to compensate for a challenge to their personal self-views synergistically amplified their endorsement of pro-group action. A complementary test of the identity synergy principle turned on independently activating personal and social identities of highly fused persons by first asking them how they would respond in the wake of a physical attack on themselves (a challenge to the personal self) or an attack on their group (a challenge to the social self). Later, the investigators assessed participants' endorsement of pro-group actions. The results indicated that activating *either* the personal or social identities of highly fused persons increased their subsequent propensity to endorse fighting or dying for the group. No such pattern emerged among non-highly fused persons (Swann et al., 2009, Experiment 3; see also Baray et al., 2009).

Replicating the earlier findings, the foregoing findings indicated that the flow of activation can move from the personal to the social self. One additional finding indicated that the flow of activation can move in the opposite direction, from the social to the personal self. That is, activating the social selves of fused participants (but not non-fused participants) increased subsequent ratings of the certainty of personal selves (Swann et al., 2009, Study 3). Finally, evidence of compensatory pro-group activity following challenges to personal self-views was replicated in a later investigation (Gómez, Brooks, et al., 2011, Study 10) in which the verbal measure of fusion served as a predictor of endorsement of extreme pro-group behavior.

A recent series of studies of the relationship of identity fusion to reactions to irrevocable social ostracism provides further support for the identity synergy principle. In these studies, ostracizing participants for either their personal preferences (i.e., personal self-views) or their group membership (i.e., social self-views) amplified their subsequent endorsement of three distinct types of compensatory activities: endorsement of extreme actions for the group, stiffened resolve to remain in the group, and increased

charitable donations to the group (Gómez, Morales, et al., 2011). Hence, as in the initial studies (Swann et al., 2009), the findings supported the identity synergy principle by showing that it was possible to amplify pro-group action by activating either the personal or social identities of fused participants. Apparently, for highly fused persons, the boundaries between their personal and social selves are sufficiently porous that being excluded from the group is so upsetting that it triggers self-sacrificial behavior. This pattern, however, did not emerge among non-fused participants, suggesting that the boundaries between their personal and social self-views were relatively impermeable.

### Relational Ties Principle

The relational ties principle suggests that highly fused persons should be especially inclined to indicate that they are willing to sacrifice their lives to save the lives of fellow group members. To test this proposition, Swann, Gómez, Dovidio, et al. (2010) created several interpersonal variations of the classic trolley dilemma. In one study, participants who were fused with their country endorsed saving fellow Spaniards by jumping to their deaths in front of the speeding trolley. Two additional studies showed that the self-sacrificial behaviors of fused participants generalized to saving members of an “extended family” (Europeans) but not members of an outgroup (Americans).<sup>3</sup> In a final study, fused participants endorsed pushing aside a fellow Spaniard who was poised to jump to his death and jumping themselves, thereby initiating a chain of events that would ostensibly lead to the deaths of several terrorists. Apparently, highly fused persons are so strongly aligned with their fellow group members that they would prefer that they themselves, rather than a group member, should die. In all four studies, participants who were not highly fused were reluctant to sacrifice themselves.

The desire of highly fused persons to help fellow group members has also been shown to influence overt behavior. That is, highly fused persons were especially inclined to donate their personal funds to a needy member of the ingroup. Moreover, this tendency was amplified when participants were physiologically aroused (Swann, Gómez, Huici, et al., 2010).

As noted above, the relational ties principle suggests that highly fused persons will feel that they and other group members synergistically strengthen each other. This perception of reciprocal strength should foster the perception that together, the members of the group are uniquely invulnerable. Feelings of invulnerability have been linked to the propensity to engage in dangerous behavior (e.g., Greene, Krmar, Walters, Rubin, & Hale, 2000; Ravert et al., 2009). Hence, fusion may foster perceptions of invulnerability (as well as agency), and such perceptions should, in turn, motivate extreme pro-group behavior. To test the possibility that perceptions of invulnerability and agency might mediate the effects of fusion on endorsement of pro-group behavior, researchers tested the mediational model displayed in Figure 2 (Gómez, Brooks, et al., 2011, Study 9). They discovered that (a) fusion was related to the two mediators (invulnerability and agency), (b) the two mediators were related to endorsement of pro-group action, and (c) controlling for the effects of the mediators eliminated the relationship between fusion and endorsement of pro-group behavior. Hence, perceptions of invulnerability and agency fully mediated the relationship of fusion to endorsement of extreme behavior for

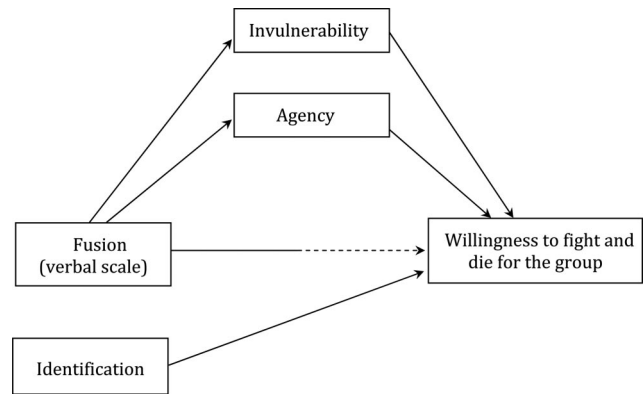


Figure 2. Invulnerability and agency mediate the effect of fusion on endorsement of extreme behavior for the group.

the group. These findings replicated and extended earlier evidence that agency mediates the impact of fusion on pro-group behavior (Swann, Gómez, Huici, et al., 2010).

### Irrevocability Principle

Researchers have tested the “once fused, always fused” hypothesis by comparing the temporal stability of fusion-with-country scores of Spaniards who were highly fused with those of persons who were only moderately or weakly fused. In four independent samples ( $N_s = 513, 155, 421, 219$ ) collected over delays ranging from 1 to 18 months, strong test–retest correlations on the verbal measure of fusion emerged among those who were highly fused (i.e., those who scored in the upper tertile on fusion initially;  $r_s = .61, .59, .62, .54$ ). The stability coefficients for highly fused participants were significantly higher (all  $Z_s > 1.88, p_s < .03$ ) than the coefficients associated with participants from the lower ( $r_s = .36, .28, .22, .24$ ) or middle ( $r_s = .21, .35, .33, .23$ ) tertiles.<sup>4</sup>

In short, there is some rudimentary evidence for each of the principles of identity fusion theory. That is, the research literature suggests that fusion is a state in which the personal self of group members remains agentic, can synergistically motivate group behavior, involves relational ties, and is relatively stable. Nevertheless, the extant literature has provided relatively little insight into the underlying causes of fusion. Furthermore, little has been said regarding the boundary conditions of fusion, such as the conditions under which the process of fusion will be

<sup>3</sup> Other research has followed up on this finding by showing that although there is some limited degree of spillover from fusion with a given entity to related entities, there is also specificity. For example, Spanish participants who were fused with Spain expressed more willingness to fight and die for Spain than for Europe, whereas those fused with Europe expressed more willingness to fight and die for Europe than for Spain (Swann, Gómez, Huici, et al., 2010).

<sup>4</sup> We focus on test–retest correlations here because this is the standard procedure for assessing the stability of the rank-orderings of individuals (e.g., Nunnally & Bernstein, 1994). Notably, parallel analyses using identification as the index of alignment with the group revealed no such pattern.

reversed and the person will “defuse” from the group.<sup>5</sup> We consider these issues next.

### Causes of Identity Fusion

The willingness of people to engage in extreme behaviors such as fighting and dying for one’s group is baffling because it appears to be at odds with a rational, cost-benefit analysis. Here, we have attempted to solve this puzzle by focusing on one potential root cause of self-sacrifice, namely identity fusion. This shift raises an entirely new set of questions. For example, what are the genetic and cultural factors that encourage the development of fusion?

We begin by offering an evolutionary perspective on the causes of fusion and then discuss various more proximal, cultural influences on fusion. Notably, distal and proximal causes shed light on different aspects of the fusion process. For example, the evolutionary perspective speaks mostly to the origins of relational ties and how these ties can be projected onto groups where no genetic relationships exist. Consideration of more proximal causes and influences help to understand the conditions that foster the emergence of feelings of connectedness, reciprocal strength, and shared category membership that are the hallmarks of fusion.

**Evolutionary origins of fusion.** Both Darwin (1859) and Wallace (1870; co-founder of evolutionary theory) struggled to explain self-sacrifice for the group within a natural selection framework. To this end, they added scientifically questionable parameters such as “moral virtue” or “spiritual essence” to the “survival of the fittest” mechanism in evolutionary theory. Roughly a century after Darwin wrestled with the paradox of human self-sacrifice, Hamilton (1964a, 1964b) introduced the notion of inclusive fitness. He reasoned that because close relatives of an organism are likely to share genes with that organism, behaviors that promote the survival of such relatives will increase the likelihood that the shared genes will be passed on. This could explain why individuals might compromise their individual fitness to bolster their “inclusive fitness” (wherein fitness includes genes shared with relatives). Hamilton buttressed this conclusion with a mathematical proof that demonstrated that the inclusive fitness of an organism varies as a function of the sum of its own reproductive success (classic fitness) plus the effects of the organism’s actions on the reproductive success of genetic relatives (weighted by the degree of relatedness of the relatives). In subsequent years, researchers reported studies of diverse taxa, ranging from amoebas (Strassman, Zhu, & Queller, 2000) to primates (Buchan, Alberts, Silk, Altmann, 2003; Chapais & Berman, 2004; Silk, 2002; Tofilski et al., 2008), indicating that willingness to self-sacrifice increases with genetic relatedness. Hence, from the vantage point of evolutionary theory, the crucial outcome is the survival of the gene rather than the individual who happens to be carrying the gene: The “fittest” in “survival of the fittest” refers to a gene rather than the individual (Dawkins, 1976).

The cognitive architecture responsible for fusion may have evolved under natural selection as a mechanism designed to detect the genetic-relatedness of other group members. Clearly, genetic relatedness cannot be observed directly. Although cues such as phenotypic similarity may be used as evidence of paternity (Alvergne, Faurie, & Raymond, 2009; Platak, Burch, Panyavin, Wasserman, & Gallup, 2002), such cues are prone to error and are limited in scope. Instead, when humans lived in small groups, they may have inferred genetic relatedness from degree of association with other group members or even the sheer amount of time two individuals spent with one another

prior to adulthood (Lieberman, Tooby, & Cosmides, 2007). Insofar as long-term association promotes fusion and fusion promotes reciprocal cooperation and altruism, fusion could have evolved as a mechanism for demarcating tribal groups and maximizing the inclusive fitness of individuals within such groups.

Nevertheless, the principle of inclusive fitness cannot explain the willingness of humans to fuse with large groups of genetically unrelated individuals (i.e., extended fusion). For instance, modern-day suicide bombers and members of modern military units appear to fuse with persons who are too distantly related genetically for Hamilton’s (1964a, 1964b) rule to apply. One way to rescue an inclusive fitness explanation for the evolution of fusion is to assume that fusion was far more likely to be restricted to small tribal groups in the ancestral past than is typically the case today (for other explanatory frameworks, see Buss, 2012; Nowak, 2006; Tooby & Cosmides, 2010). In this scenario, initially, fusion emerged as a biological adaptation supporting cooperation within tribal groups. Later, however, it served increasingly as a means of solving collective action problems on a much larger scale. In effect, thinking in terms of tribal units (and the fusion it engendered) was eventually extended to larger communities. One of the hallmarks of such groups is that members feel they share something in common, such as blood, deep attraction, national identity, or a history of suffering. In this way, the tendency to fuse with other group members may have gradually shifted from local fusion (often based on genetic relatedness) to something resembling the modern construct of “shared essence,” a sense of deep, underlying similarity that provides a basis for extended fusion (Medin & Ortony, 1989).

Within a shared essence framework, “ingroups” and “outgroups” are understood to resemble natural kinds or species (Rothbart & Taylor, 1992), especially when they are highly entitative (McGarty, Haslam, Hutchinson, & Grace, 1995; Yzerbyt, Rocher, & Schadron, 1997) or organized around endogamy and descent (Gil-White, 2001). Indeed, people seem to have a natural propensity to parse the social world in ways akin to their understanding of the biological world (Gelman, 2003; Hirschfeld, 1996), motivating the perception of large social aggregates “as-if” they are genetically related. Such essentialistic thinking has implications for how people perceive groups (Bastian & Haslam, 2006, 2007) as well as how they respond to markers of group membership (Bastian & Haslam, 2008; Bastian, Loughnan, & Koval, 2011; Chao, Chen, Roismann, & Hong, 2007; M. J. Williams & Eberhardt, 2008). Of particular relevance here, modern humans impute shared essence to entire groups of genetically unrelated individuals (Gelman, 2003; N. Haslam, Rothschild, & Ernst, 2000; Hirschfeld, 1996; Medin & Ortony, 1989; Rothbart & Taylor, 1992). Such

<sup>5</sup> Identity fusion requires the existence of a social group because, by definition, it involves the union of a personal and social identity. Nevertheless, individuals may also fuse with abstractions. Feelings of oneness with God, for example, may compel people to devote their lives to the priesthood. Similarly, people may develop a “calling”—a powerful urge to pursue some professional or recreational activity—that is propelled by feelings of fusion. Further, people may feel fused with brands or products. In each of these instances, highly fused persons may experience feelings of oneness and connectedness with the target of their devotion even though there is no group associated with the target of their attachment. The absence of a group in such instances, however, means that it is inappropriate to consider these examples of alignment with an abstraction to be instances of *identity* fusion.



attributions of shared essence to other group members may allow for and enhance fusion with the group.

In short, the tendency for people to fuse with groups and make pro-group sacrifices may be a by-product of one or more basic survival mechanisms. These mechanisms may form a platform upon which ideologies and cultural practices may develop that further cultivate a social environment that fosters the development of feelings of fusion.

**Fusion-friendly ideologies.** One tradition that might reinforce or amplify biological precursors of fusion is the *Jus-Sanguinis* citizenship tradition, wherein the main criterion for membership to the national “polity” is bloodline. This tradition is relatively common in countries such as Germany and Austria. Lower fusion rates with country should emerge in countries with a *Jus Soli* citizenship tradition, where bloodline criteria are irrelevant when determining citizenship (e.g., France; see Kohn, 1944; A. D. Smith, 2001).

Although bloodline considerations are less prominent in the ethic *Ubuntu*, it likewise encourages fusion-like feelings of allegiance toward other group members. Prominent in the Bantu dialect in South Africa and neighboring counties, *Ubuntu* emphasizes the fundamental connectedness of group members and is considered the essence of being human. It refers to a philosophy that encourages compassion and generosity toward fellow group members as well as efforts to achieve mutual understanding (Tutu, 1999). If such efforts fail and misunderstanding emerges, reconciliation is preferred over retribution.

Fusion-like allegiances with country are also apparent in the societies in which there is a strong “culture of honor,” such as in certain Mediterranean countries (Rodriguez Mosquera, Manstead, & Fischer, 2000, 2002) and in parts of the southern United States (Cohen & Nisbett, 1994; Cohen, Nisbett, Bowdle, & Schwarz, 1996). Such societies emphasize a strong linkage between the honor of the individual self and the honor of fellow ingroup members. The relational ties between ingroup members are so important in such cultures that it is normative to respond to challenges to the honor of ingroup members with extreme retribution, including murdering the offending party.

In addition to encouraging the *development* of relational ties, fusion-friendly ideological systems may also explicitly encourage group members to *label* their ties to one another as relational. For example, military units throughout the world, fraternities/sororities in the United States, and businesses in Japan all advertise their groups as being family like. Such labeling practices encourage group members to construe the group as closely knit and fuse with it. Similarly, in some cultures and countries, the dominant ideology emphasizes that the country is like a family to its people. Such was the case in former communist countries like the former Soviet Union, wherein fellow citizens referred to each other as “brothers” and “sisters.” Even more explicitly, in China, Confucian ideology (reinforced by Chinese leaders) emphasized that the nation is “family writ large” (Liu, Li, & Yue, 2010). It is thus not surprising that recent evidence has suggested that fusion rates are strikingly high in China (75% among university students according to Jetten, Gómez, Buhrmester, Brooks, & Swann, 2012). In contrast, fusion rates were much lower in Western countries such as Australia (10%) and the United States (25%). Countries that emphasize relational ties but lack a strong and shared national ideology fell in between (60% in Indonesia, 32% in Spain).

Note that cultural ideologies and group norms may not only encourage feelings of fusion, they may also shape the manner in which such feelings are expressed. Thus, for example, just as some groups may develop norms that endorse pacifism as a means of achieving the goals of the group, other groups may advocate extreme behaviors such as suicide bombings as a means of accomplishing agreed upon goals of the group.

**Transient contextual origins of fusion.** One common cause of local fusion is sharing “bonding” experiences with others in a group context. This may encourage the belief that fellow group members perceive the world in a fundamentally similar way (e.g., Pinel, Long, & Crimin, 2008, 2010; Pinel, Long, Landau, Alexander, & Pyszczynski, 2006), a perception that may produce the profound feelings of connection that give rise to fusion. There is also a relatively “hot” pathway to local fusion in which group members share significant experiences with others and subsequently fuse with them. For example, the American soldier in Afghanistan quoted at the outset of the article fused with his comrades in arms after co-experiencing a series of frightening situations with them. In this instance, the soldier came to perceive his fellow group members as kin-like, referring to them as “brothers,” despite the absence of a biological relationship with them. In fact, some evidence suggests that sharing subjective experiences with others may be a more powerful predictor of attachment to fellow group members than the perception of shared objective qualities (Atran, 2010; Drury, 2011; Pinel et al., 2008, 2010, 2006). Moreover, shared experiences seem to be particularly potent in facilitating attachment to others when the experiences are challenging or traumatic rather than positive (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001).

Consider participation in rituals such as the ordeals of initiation cults, millenarian sects, and vision quests. Such “imagistic” rituals (Atkinson & Whitehouse, 2011; Whitehouse, 1995, 2000, 2004) are typically emotionally intense events that are experienced rarely (only once in a lifetime in some cases). The intensity of such rituals is exaggerated by extreme forms of deprivation, bodily mutilation and flagellation, and psychological trauma based around participation in shocking acts. These practices are widespread in small-scale tribal societies (Whitehouse, 1996), modern rebel groups (Whitehouse & McQuinn, in press), and some ancient civilizations (Whitehouse & Hodder, 2010). Experiments show that imagistic rituals typically involve intrinsically puzzling (causally opaque) procedures that trigger intense reflection (Richert, Whitehouse, & Stewart, 2005). Such reflection appears to be an essential element in the process (cognitive dissonance reduction does not appear to adequately explain these effects),<sup>6</sup> as reflection produces enduring and vivid episodic memories for the ordeals and the other group members who uniquely shared in the ritual. To the extent that humans are “creatures of concreteness” (Nisbett, Borgida, Crandall, & Reed, 1976), such experiences may be particu-

<sup>6</sup> People theoretically experience dissonance only insofar as the relevant actions are freely chosen (e.g., Aronson & Mills, 1959; Gerard & Mathewson, 1966). As such, dissonance theory is poorly suited for explaining the tendency for these particular painful group initiations to produce cohesion because novices undergoing initiation into bellicose tribes are often forcibly abducted by their initiators and are obliged to submit to the rituals on pain of death (Barth, 1987).

larly compelling sources of fusion—sometimes resulting in allegiances that are stronger than those found between blood relatives. Indeed, Atran and Henrich (2010) have suggested that group rituals encourage people to make and keep oaths to each other (Boyer, 2001) and to suppress selfishness and free-riding (Norenzayan & Shariff, 2008). In this way, rituals may give rise to a psychological immune system (Wilson, Gilbert, & Centerbar, 2003) that protects pro-group beliefs against rational counterarguments.

Whatever the precise nature of the mechanism underlying the effects of rituals may be, this discussion of variables that may *promote* fusion leads one to ask if there may be a corresponding set of variables that *undermine* fusion, a process we have dubbed “de-fusion.” In the section that follows, we consider when such “de-fusion” processes may occur.

### Causes of De-Fusion

The irrevocability principle suggests that once people fuse with a group, they will tend to remain fused with that group. Indeed, instances of de-fusion are likely to be emotionally wrenching, as they theoretically entail substantial restructuring of the self-concept, one’s relation to others, and even the very meaning of one’s actions (Wegner & Vallacher, 1986). For these reasons, people may defuse from a group quite reluctantly and only if they feel that remaining in the group is simply impossible.

One potential cause of de-fusion is the disbanding of the group or completing one’s terms of service with the group. On such occasions, highly fused individuals will be strongly motivated to restore their relation to the group. Consider, for example, the protagonist in the film *The Hurt Locker*. As the film opens, viewers are taken to Iraq where they are acquainted with an American demolition expert who becomes fused with his comrades in arms as he repeatedly risks his life in the service of his country. When his tour of duty ends and he is obligated to return home, he is reunited with his family. Yet, he is uneasy, for he longs for the world he left behind, especially the men with whom he fought. In the concluding scene, he volunteers for another life-threatening tour of duty in Iraq, apparently because he could not defuse with the military.

Although *The Hurt Locker* is a fictional account, there can be little doubt that people typically find defusing from a group to be psychologically wrenching. Such instances point to a liability of fusion. That is, because the state of fusion is so all consuming, it may compromise people’s capacity to compartmentalize their group-related experiences (Hugenberg & Bodenhausen, 2004). The single-mindedness of highly fused individuals may thus impair their ability to display sufficient role flexibility needed to maintain healthy relationships with individuals who are not members of the fused group. In addition, insofar as such individuals display extreme pro-group behaviors that are deviant in nature, they may find that they are not welcome in circles outside the fused group. For example, gang members who commit crimes as part of initiation rituals may become social pariahs who cannot win acceptance within alternative opportunity structures that welcomed them prior to their fusion with the gang. This may further reduce the likelihood that individuals will defuse from the group.

De-fusion may also occur when relational ties with group members are shattered. For example, if one group member betrays

another group member in a manner that is unforgivable (e.g., causing a group member’s death), ejection from the group and de-fusion may follow. Finally, people may choose to de-fuse from the group if they conclude that it has changed in a way that contradicts its core values and beliefs. For example, some Anglican priests came to believe that the church’s decision to permit the ordination of women would change the nature and identity of the Church. They accordingly left the Church because they believed that its identity had changed in a manner that was so fundamental that it ceased to be the church that they had joined originally (Sani & Reicher, 1999).

### Discussion

This article focuses on “identity fusion,” a form of alignment with groups that has previously been overlooked. Unlike conventional forms of alignment with groups, fusion is marked by a visceral feeling of oneness with the group. This feeling is associated with a highly agentic-personal-self and unusually porous, highly permeable borders between the personal and social self. The porous borders associated with fusion raise the possibility that both the personal and social self will combine synergistically to motivate unusually extreme sacrifices for the group. In addition, the porous borders will encourage highly fused persons to develop strong relational ties with their fellow group members and maintain lasting commitment to the group.

Fusion theory specifies four principles: agentic-personal-self, identity synergy, relational ties, and irrevocability. The research literature has provided support for each of these principles. Although most of the support for fusion theory focused on the degree to which fused persons endorsed extreme behaviors (i.e., fighting and dying for the group), fusion was also linked to overt behaviors such as donations of personal funds (Gómez, Morales, et al., 2011; Swann, Gómez, Dovidio, et al., 2010), motor behavior (Swann, Gómez, Dovidio, et al., 2010), and actual alteration of primary sex organs within a sample of transsexuals (Swann et al., 2012). Moreover, fused participants endorsed plunging themselves in the path of a runaway trolley to save the lives of individual group members (Swann, Gómez, Dovidio, et al., 2010).

Given the utility of fusion in predicting pro-group behavior, it is important to learn more about its origins. Evolutionary theory’s principle of inclusive fitness might explain the self-sacrificial behaviors of highly fused persons if one assumes that humans rely on tribe-detection systems that are prone to false positives in the modern world. At a more proximal level, some cultures and ideologies promote beliefs, attitudes, and norms that motivate people to fuse with the group and its members. Fusion and self-sacrifice may also be triggered by transient contextual variables, such as certain ritual practices. Tests of these hypotheses will clarify how biological, cultural, and contextual factors interact to produce, sustain, and change fusion. In so doing, researchers will not only attain a clearer conception of the nature of fusion and how it motivates extreme behavior, they will also learn more regarding how fusion is similar to, and different from, other forms of alignment with groups such as identification. Such knowledge will advance understanding of each of these constructs as well as the processes that they regulate.

## Implications

Past theorizing on the causes of extreme group behaviors such as terrorism has focused on the influence of dispositional variables such as psychopathology (e.g., Post, 2005), a desire to reduce feelings of uncertainty (Hogg, Sherman, Dierselhuis, Maitner, & Moffit, 2007; van den Bos, van Amerijde, & van Gorp, 2006) or increase perception of personal significance (e.g., Kruglanski, Chen, Dechesne, & Fishman, 2009), personal ideology (Atran, 2004), personal circumstances (e.g., Sageman, 2004), a mixture of ideology and personal circumstances (Pedahzur, 2005), and so on (for extensive lists of possible motivations underlying acts of terrorism, see Bloom, 2005; Stern, 2003). All of these frameworks implicitly or explicitly assume that there exists a fundamental tension between the individual versus the collective or social self (Allport, 1962; for a similar argument, see also Brown & Turner, 1981; Kampmeier & Simon, 2001). This presumption that the personal and social self are perpetually in competition is unfortunate and misleading, as a full understanding of extreme behavior requires coming to grips with the contribution of both personal and social influences (Baray et al., 2009; Post, Sprinzak, & Denny, 2003). Whereas dispositional formulations cannot explain why extreme behavior is specific to particular groups and is regulated by situational factors, contextual formulations cannot explain why only some individuals are willing to sacrifice themselves for the group. Conspicuously absent in these analyses is theorizing that illuminates the interplay of personal and social identities in extreme group behavior (for a parallel argument in a different domain, see Hornsey & Jetten, 2004, 2005; Postmes et al., 2005; Postmes & Jetten, 2006). Fusion theory is designed to fill this gap in the extant literature.

The distinction between fusion theory and purely dispositional or purely contextual theoretical frameworks is readily apparent. That is, fusion theory is an approach in which extreme behavior grows out of the union of personal and social self-views in combination with various contextual triggers, such as factors that activate the personal or social self, cultural ideology, and so on. However, the fusion approach also differs from other models, such as those that attribute extreme behavior to an effort to reduce either individual-level uncertainty (Hogg, 2009; van den Bos et al., 2006) or mortality salience (Pyszczynski et al., 2006). In these approaches, the group is merely a vehicle to achieve certainty or counter mortality salience threat, which raises questions regarding how enhanced willingness to fight and die for the group would accomplish either of these goals. More generally, it is unclear how either of these theoretical frameworks would explain evidence that feelings of agency and invulnerability mediated the link between fusion and self-sacrifice; in fact, research on fusion suggests that the activities of highly fused persons reflect feelings of *certainty* rather than *uncertainty*, of *agency* rather than anxiety, and of *invulnerability* rather than mortality salience threat.

Important distinctions can also be made between fusion and “brainwashing.” Most important, whereas fused persons maintain a strong sense of personal agency that they channel into pro-group behavior, victims of brainwashing abdicate their sense of personal agency to external agents such as group leaders (Zimbardo, 2007). Insofar as the group leader advocates behaviors that are in the service of the interests of the group, the behaviors of fused persons and brainwashed persons may be indistinguishable. Nevertheless,

if the group leader or other group members encourage behaviors that harm group goals, the crucial difference between fused and brainwashed persons will become evident. In such instances, fused persons will challenge the group leader or the individual who threatens to compromise the priorities of the group because they are so deeply committed to the group and its members (cf. Packer, 2008). In contrast, the blindly conforming, brainwashed individual will submit to the leader and enact behaviors that may ultimately lead to the undoing of the group. Such submission to demands that are toxic to the group are contrary to the spirit of fusion.

The fusion formulation may also help resolve several longstanding riddles in the group literature. Consider social identity theory’s assumption that once individuals identify with a group, the relative salience of the group identity triggers a uni-directional flow of influence from the group to the individual. The assumption that the behavior of group members is exclusively determined by their social identities raises crucial and unanswered questions regarding the source of personal agency to act on behalf of the group. Similarly, if the behavior of group members is exclusively regulated by their group identities, it is unclear why they would ever work to change the group (see Reicher & Haslam, 2006).

Fusion theory overcomes these difficulties by assuming that the personal self can remain salient while the group identity is salient. This introduces a wide range of possibilities to the group literature that previous researchers have largely overlooked. As suggested above, people may join extremist organizations because they believe that the group embraces some central values rather than as a means of shoring up a weak or uncertain self (Hogg, 2009; van den Bos et al., 2006). In addition, people can feel empowered to act on behalf of the group yet remain willing to seek to change the group: Highly fused leaders may, for example, remain highly committed to the group while exercising their individual agency to steer the group in new directions (see also S. A. Haslam et al., 2011). Similarly, in this same vein, fusion theory explicates why complete commitment to the group does not necessarily entail a loss of self and irrational sheep-like conformity to a group that has veered out of control (Janis, 1972). Indeed, it suggests that individuals who are strong and in control of their actions and thoughts might rationally engage in pro-group behavior (for a similar argument, see Jetten & Hornsey, 2011). In these instances, it is not that groups magically transform good persons into villains or vice versa, it is that they serve as triggers that activate personal identities that subsequently guide group behavior.

Finally, fusion theory is not hamstrung by social identity theory’s assumption that intergroup behavior is shaped and informed by intergroup comparisons (Tajfel & Turner, 1979; Tajfel & Wilkes, 1963; J. C. Turner et al., 1987; but see Drury, 2011). In contrast, because fusion theory focuses just as much on relationships within groups as it does on the social category as a whole, it can readily explain instances in which highly fused persons make pro-group sacrifices in the absence of intergroup comparisons—for example, instances in which group members perform acts of valor to save compatriots who are victims of natural disasters.

In addition to offering a new perspective on old questions, the fusion approach also raises new questions. For example, if fusion may take two forms (local and extended), which form is more likely to be responsible for extreme pro-group actions such as terrorism? We suggest that both forms of fusion may play a role in terrorism: Would-be terrorists might simultaneously fuse with a



small group of intimate others but also with a larger group (e.g., radical Islamists). Similarly, a soldier may be simultaneously fused with his local regiment as well as the army or nation. We suspect that fused people will be most likely to make extreme sacrifices when both forms of fusion are present. This may explain why organizations that inspire both local and extended fusion spread and endure, sometimes on a global scale. For example, religious groups may emphasize connecting not only with the local church but also with other believers around the world. Even al-Qaeda cultivates the formation of local cells that are nevertheless aligned with a larger international organization. Indeed, members may experience fusion with “terrorist brother cells” in other countries whose members they have not met.

This discussion of the ways in which local and extended fusion may complement and reinforce one another suggests that it may be misguided to ask which form of fusion is more powerful or important. Nevertheless, it may be more constructive to examine the ways in which different group sizes associated with local and extended fusion may lead to distinctive outcomes. For instance, small groups of locally fused individuals are likely to engage in terrorism or guerilla warfare because they lack the resources to build an army. Large nation states in which extended fusion is common, however, may enact a full-scale war or utilize relatively exotic (and expensive) weaponry such as cruise missiles or predator drones.

### Fusion, for Better, or for Worse?

We were attracted to the fusion construct due to a concern over its negative consequences. We were especially concerned with the motivating role of fusion in extreme behaviors such as terrorism and warfare, activities that incur huge personal and social costs. Yet, it soon became clear to us that it is overly simplistic to argue that fusion is either good or bad (see also Putnam, 2000). Instead, fusion will be just as likely to lead to actions that are generally regarded as pro-social and beneficial (e.g., volunteerism, the heroic actions of Japanese nuclear plant workers after the 2011 tsunami) or as anti-social and harmful (crime, war, or terrorist activity). This issue is further complicated by the fact that the same actions that are perceived as helpful by ingroup members (retaliating against members of an outgroup) may be perceived as harmful by outsiders.

Perhaps the clearest conclusion that one can draw here is that the process of fusion *augments* and *empowers* the group. That is, because group members who are highly fused with the group channel their feelings of personal agency into the priorities of the group, they effectively bolster the *collective* agency of the group. A more robust and effective group will result. Individuals may also benefit from being fused. That is, by channeling their feelings of agency into the agendas that they share with the group, highly fused persons are able to act in accordance with a meaning system that extends beyond their own needs and desires. Fusion may thus satisfy several crucial needs at once, including personal agency (Ryan & Deci, 2000), affiliation and belongingness (Baumeister & Leary, 1995; K. D. Williams, 2007), and meaningfulness and epistemic certainty (Kruglanski, Shah, Pierro, & Manetti, 2002). Fusion may therefore offer individuals a pathway to a meaningful existence and a high quality of life (Jetten, Haslam, & Haslam,

2011; Jones & Jetten, 2011). In these ways and related ones, fusion may represent an asset to individuals as well as the group.

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