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# Dying and Killing for One's Group: Identity Fusion Moderates Responses to Intergroup Versions of the Trolley Problem

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#### **Abstract**

Using an intergroup version of the trolley problem, we explored participants' willingness to sacrifice their lives for their group. In Study I, Spaniards whose personal identities were fused with their group identity endorsed saving fellow Spaniards by jumping to their deaths in front of a runaway trolley. Studies 2 and 3 showed that the self-sacrificial behaviors of fused Spaniards generalized to saving members of an extended in-group (Europeans) but not members of an out-group (Americans). In Study 4, fused participants endorsed pushing aside a fellow Spaniard who was poised to jump to his death and initiate a chain of events that would lead to the deaths of several terrorists, so that they could commit this act themselves. In all four studies, nonfused participants expressed reluctance to sacrifice themselves, and identification with the group predicted nothing. The nature of identity fusion and its relationship to related constructs are discussed.

#### **Keywords**

identity fusion, social identity, personal identity, extreme behavior, self-verification

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When it comes to taking active, bold steps to save human life, most people are surprisingly reluctant to "get personally involved." This is, at least, the conclusion emerging from research on a provocative set of moral dilemmas known collectively as the trolley problem (Foot, 1967). In one version, five people are about to be killed by a runaway trolley. If someone pushes a large man off a bridge into the trolley's path, the five will be spared, but the man will die. Most people say that they would refuse to push the large man into the trolley's path, thereby allowing the trolley to kill the five people on the track (Cushman, Young, & Hauser, 2006; Greene, Sommerville, Nystrom, Darley, & Cohen, 2001). Nevertheless, in another version, most people do endorse merely flipping a switch that diverts the trolley so that it kills one person instead of five. Apparently, people are eager to save lives, but not when it requires personally pushing someone to his or her death (e.g., Greene et al., 2009).

Yet not everyone seems to shrink from personal involvement when it comes to matters of life and death. In fact, there is a long history of individuals who sacrifice their own lives to advance the agenda of their group (e.g., Durkheim, 1897/1951). Although the origins of such *altruistic suicides* are complex (e.g., Pedahzur, 2005), recent research has hinted that extremely strong ties

to the group may sometimes contribute. In particular, individuals whose personal identities are *fused* with their group are so loyal to it that they express willingness to die on its behalf (Swann, Gómez, Seyle, Morales, & Huici, 2009).

An outgrowth of self-verification theory's assumption of a highly agentic personal self (e.g., Swann, 1983, in press), the construct of identity fusion is based on the distinction between personal and social identity. Personal identity is derived from those qualities that are unique to the individual self and thus distinguish individuals from one another. In contrast, social identity results from membership in groups (e.g., "American") and thus aligns people with others who share that identity (James, 1890; Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Whereas most people distinguish their personal identities from their group identities, fused people see these identities as completely overlapping, as indicated by their endorsement of a pictorial representation that places the self completely inside the group (see Fig. 1). By endorsing

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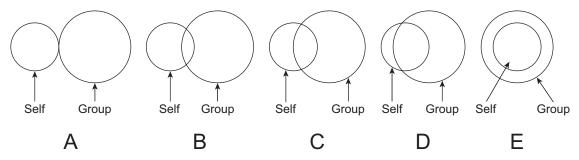


Fig. 1. The fusion scale (Swann, Gómez, Seyle, Morales, & Huici, 2009). Respondents are asked which pictorial representation most closely reflects their relationship to their group. Response options range from no overlap at all (A) to complete overlap, or identity fusion (E).

this option, fused persons denote feelings of shared essence and oneness with the group. Such feelings, like the feelings of shared essence that mothers have with their children, compel fused persons to organize their individual agency (i.e., capacity to initiate and control intentional behavior) around group membership. Note that, in situating themselves inside the group, fused persons acknowledge no loss of personal identity. To the contrary, people who place themselves in the fused category attest that their personal self remains motivationally potent; it is just that their goals and purposes are tethered to their interpretation of the goals and purposes of the group.

Identity fusion is conceptually and empirically distinct from a form of group loyalty featured in social identity theory (Tajfel & Turner, 1979), group identification. High group identification refers to feeling strong ties to the group, and such feelings predispose individuals to engage in collective action on behalf of the group. Individuals with high group identification may be eager to band together with other group members and derogate out-group members (e.g., Branscombe, Ellemers, Spears, & Doosje, 1999; Hewstone, Rubin, & Willis, 2002), but they will not enact progroup activities as individuals in isolation (Klandermans, Sabucedo, Rodriguez, & de Weerd, 2002; Simon & Klandermans, 2001), especially if such activities are extreme (Swann et al., 2009; Swann, Gómez, Huici, Morales, & Hixon, in press). In contrast, fused persons retain a strong sense of individual agency that is organized around group membership; indeed, a previous study found that agency associated with the group mediated the effects of fusion on progroup behavior (Swann et al., in press). Therefore, whereas fused persons yoke their individual agency to the group, highly group-identified people who are not fused do not tend to link their individual agency to the group. The fusion approach thus complements social identity theory (especially early versions that emphasized ideas such as functional antagonism) by highlighting a form of alignment with the group that involves tethering individual agency to the outcomes of the group (see also Baray, Postmes, & Jetten, 2009).

If identity fusion is strongly linked to individual agency, it should predict people's willingness to sacrifice their own lives to save members of the group with which they are fused (ingroup members). But fused persons may be more than single-minded agents for the particular group with which they are fused. That is, their feelings of individual agency may extend not only to the members of the in-group, but also to the members of extended in-groups (with whom they share a superordinate group membership but are not necessarily fused). Furthermore, their elevated feelings of individual agency for the group might motivate them to be personally involved in implementing actions that protect the group. The research we report in this article was designed to test these novel hypotheses regarding the nature of identity fusion.

We tested four intergroup variations of the trolley dilemma. Participants were Spaniards who were either fused or nonfused with their country. Spanish participants were used because previous research (Swann et al., 2009) had shown that rates of fusion with country are elevated among Spaniards (roughly 40%) relative to citizens of other countries (e.g., only 20% of U.S. citizens are fused with their country). Rates of fusion across our four studies averaged 38.3%.

In Study 1, participants chose between letting a runaway trolley crush and kill five in-group members (Spaniards) or sacrificing themselves to save the in-group members. Study 2 used a variation of the dilemma in which participants had three options: allowing five members of an extended in-group (Europeans) to die, diverting the trolley to kill one in-group member (a Spaniard), or diverting the trolley to kill themselves. Study 3 used a variation in which participants chose among a different set of three options: allowing five members of an extended in-group (Europeans) and five members of an out-group (Americans) to die, sacrificing themselves to save five members of an extended in-group (Europeans), or sacrificing themselves to save five members of an out-group (Americans). Finally, Study 4 offered participants a choice between allowing an in-group member to jump from the bridge, which would lead to the deaths of five terrorists, or pushing the in-group member aside so that they themselves could jump, which would lead to the same result.

We expected that nonfused participants would respond as have most participants in previous investigations of the trolley problem: by refusing to engage in extreme behavior. In contrast, we expected that fused persons would prefer to sacrifice their own lives to save multiple members of their in-group or extended in-group, and would even push an in-group member 1178 Swann et al.

aside so that they could sacrifice themselves. We anticipated that because measures of identity fusion capture a sense of individual agency more effectively than measures of group identification do, identity fusion would predict participants' responses more powerfully than would identification with the group.

## Study 1: Jumping to One's Death to Save the Group

Study 1 featured a variation of the footbridge dilemma (which is one of several variants of the trolley problem). Fused and nonfused participants chose between (a) letting a runaway trolley crush and kill five in-group members and (b) jumping off a bridge to save the in-group members at the expense of their own lives.

#### Method

**Participants.** Sixty-two Spanish undergraduates (29 women and 33 men; mean age = 33.47 years, SD = 9.14) enrolled at the Universidad Nacional de Educación a Distancia (UNED) in Madrid, Spain, completed this study on the Web for course credit.

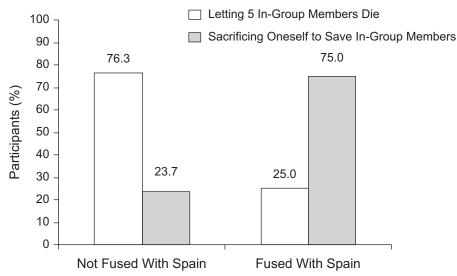
**Procedure.** After learning that the study involved responses to moral dilemmas, participants completed the pictorial measure of identity fusion shown in Figure 1 (Swann et al., 2009; see Aron, Aron, & Smollan, 1992; Schubert & Otten, 2002; Smith & Henry, 1996) and a verbal measure of group identification (Mael & Ashforth, 1992;  $\alpha = .83$ ). These measures were completed in counterbalanced order and with reference to the group "Spain." The correlation between fusion and identification was positive but modest, r(62) = .37, p < .001.

Participants then read a variation of the footbridge dilemma. Each participant was told to imagine that a runaway trolley was about to crush and kill five in-group members (i.e., Spaniards) unless the participant jumped from a bridge into the trolley's path. Participants then chose between letting the trolley crush the five Spaniards or sparing the five by sacrificing their own lives.

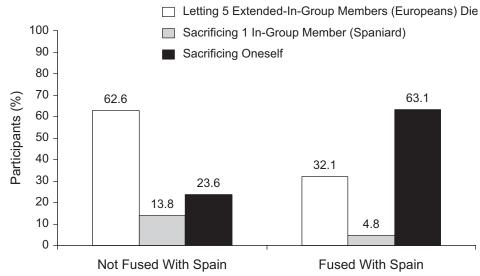
#### Results and discussion

We used a binary logistic regression to examine the impact of fusion (effect coding: -1, 1), group identification (centered), and the interaction of these two variables on the extent to which participants endorsed jumping to their death versus allowing the trolley to crush five in-group members to death. This analysis permitted a test of the possibility that fused participants might sacrifice themselves only when they had high group identification (an interactive effect), while testing the effect of fusion controlling for level of group identification. As Figure 2 shows, a main effect of fusion emerged,  $\chi^2(2, N =$ 207) = 21.21, p < .001; b = 1.11, odds ratio (OR) = 3.03, Wald  $\chi^2 = 10.80$ , p < .001. The majority of fused participants preferred to sacrifice themselves rather than let the trolley kill five in-group members,  $\chi^2(1, N=24) = 6.00$ . p < .01, whereas the majority of nonfused participants preferred to let the trolley kill their fellow Spaniards,  $\chi^2(1, N=38)=10.53$ , p<.001. Group identification had no main or interactive effects.

The results confirmed the notion that fused participants would express a willingness to sacrifice their own lives to save the lives of several in-group members. In the next study, we sought to extend the boundary conditions of this effect by investigating whether the protectiveness of fused persons would extend beyond members of the group with which they were fused to members of an extended in-group. In particular,



**Fig. 2.** Results from Study 1: percentage of participants who endorsed each response to the moral dilemma (letting five members of the in-group die vs. sacrificing oneself to save the five). Results are shown separately for participants whose identities were fused with Spain and those whose identities were not fused with Spain.



**Fig. 3.** Results from Study 2: percentage of participants who endorsed each response to the moral dilemma (letting five members of the extended in-group die vs. sacrificing an in-group member to save the five vs. sacrificing oneself to save the five). Results are shown separately for participants whose identities were fused with Spain and those whose identities were not fused with Spain.

we tested whether participants who were fused with Spain would also sacrifice themselves for fellow Europeans, a superordinate category within which Spaniards are nested but one with which Spaniards are rarely fused.

# Study 2: Jumping to Save One In-Group Member Versus Five Extended-In-Group Members

The results of Study 1 support the notion that fused individuals possess a sense of moral agency that motivates a desire to save the in-group. Although this moral agency is clearly powerful enough to motivate efforts to save the in-group, it is possible that it extends even further. Conceivably, fused persons may possess moral agency to save a wide range of related individuals, including members of extended in-groups with whom they share a superordinate group membership. To test this possibility, we added a third option to the footbridge dilemma. Specifically, participants were told to imagine that a runaway trolley was about to kill five members of an extended in-group and that they could save the five by either jumping to their death in front of the trolley or diverting the trolley to another track where it would kill an in-group member.

#### Method

**Participants.** Two hundred seven undergraduates (165 women and 42 men; mean age = 34.23 years, SD = 9.1) enrolled at UNED completed this study on the Web for course credit.

**Procedure.** As in Study 1, participants first completed measures of fusion (Swann et al., 2009) and group identification

(Mael & Ashforth, 1992;  $\alpha = .83$ ). The dilemma concerned a runaway trolley that was about to crush and kill five people. In this study, however, the five people were extended-in-group members: "Europeans." This group was chosen because it is an in-group for all Spaniards, but not one to which they are typically fused (the rate of fusion with Europe was 6.1% in Study 3). Another change from Study 1 was that participants were given two ways of saving the five people: diverting the trolley to a different track, where it would kill one in-group member (a Spaniard), or jumping to their own death to stop the trolley.

#### Results and discussion

We used a multinomial regression to examine the impact of fusion (effect coding: -1, 1), group identification (centered), and the interaction of these two variables on the extent to which participants endorsed jumping to their death versus choosing each of the other two options. As Figure 3 shows, a main effect of fusion emerged, b = 2.04, OR = 7.73, Wald  $\chi^2 =$ 7.79, p < .01. Fused participants preferred sacrificing themselves rather than letting five members of the extended ingroup (Europeans) die,  $\chi^2(1, N = 80) = 8.45, p < .01$ , or sacrificing an in-group member,  $\chi^2(1, N = 57) = 42.12$ , p <.001. Nonfused participants preferred letting five members of the extended in-group (Europeans) die rather than sacrificing an in-group member,  $\chi^2(1, N = 94) = 38.30, p < .001$ , or sacrificing themselves,  $\chi^2(1, N = 106) = 21.74, p < .001$ . Finally, fused participants were more inclined to sacrifice themselves than were nonfused participants,  $\chi^2(1, N = 82) = 7.02, p < .01$ . Group identification had no main or interactive effects.

The results of Study 2 suggest that fused people possess a sense of moral agency that compels them to act on behalf of

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the greater good (i.e., protecting an extended in-group). This finding prompted us to investigate if this sense of moral agency would extend even to members of an out-group. In Study 3, we tested whether Spaniards fused with their country would be willing to sacrifice their own lives to save five Americans.

#### Study 3: Sacrificing Oneself for Extended-In-Group Members Versus Out-Group Members

To determine if there are limits on the individuals that fused persons are willing to save, we introduced a variation of the footbridge dilemma in which participants could jump to save five extended-in-group members (Europeans), jump to save five out-group members (Americans), or do nothing (and allow the extended-in-group members and out-group members to die). We expected that fused Spaniards would be willing to die for Europeans because they are members of an extended in-group within which Spain is nested, but that fused Spaniards would not be willing to die for Americans because they are members of an out-group. In contrast, we expected that nonfused Spaniards would choose to do nothing.

#### Method

**Participants.** Sixty-six Spaniards (48 women and 18 men; mean age = 37.24 years, SD = 10.97) volunteered to complete this study on the Web.

**Procedure.** In this study, participants were first asked to complete measures of identity fusion (Swann et al., 2009) and group identification (Mael & Ashforth, 1992;  $\alpha$  = .86) in counterbalanced order, with reference to the groups "Spain," "Europe," and "America." Fusion and identification with Spain were correlated, r(66) = .29, p < .05. Rates of fusion with Spain (38%) were uncorrelated (p > .40) with rates of fusion with Europe (6.1), and entering fusion with Europe into our analyses did not change the results. No participants reported being fused with America.

Next, to determine if prejudice moderated our findings, we asked participants to report their attitudes toward the protagonists' groups using a feeling thermometer (Haddock, Zanna, & Esses, 1993). Prejudice toward Americans was not correlated with fusion with Spain (r = .10, p = .43), and nonfused and fused participants did not differ in prejudice toward Americans (Ms = 50.16 and 54.00 for fused and nonfused participants, respectively; range = 1-100; p = .43). However, this measure of prejudice was correlated with identification with Spain (r = .24, p < .05).

The moral dilemma presented participants with a scenario in which two runaway trolleys were hurtling down two parallel tracks. One trolley was about to kill five extended-in-group members (i.e., Europeans). The other trolley was about to kill five out-group members (i.e., Americans). If a participant did nothing, the runaway trolleys would kill both groups. If a participant jumped onto one set of tracks, the five Europeans would be saved but the participant and the Americans would die; conversely, if a participant jumped onto the other set of tracks, the Americans would be spared but the participant and the Europeans would die.

#### Results and discussion

We used a multinomial regression to examine the impact of fusion (effect coding: -1, 1), group identification (centered), and the interaction of these two variables on the extent to which participants did nothing or sacrificed themselves (to save five Europeans or to save five Americans). As Figure 4 shows, a main effect of fusion emerged, b = 4.47, OR = 87.28, Wald  $\chi^2 = 20.65$ , p < .001. Fused participants preferred to sacrifice themselves to save five Europeans rather than sacrifice themselves to save five Americans or do nothing,  $\chi^2(1, N = 25) = 14.44$ , p < .001. Nonfused participants preferred to do nothing rather than sacrifice themselves to save five Europeans or sacrifice themselves to save five Americans,  $\chi^2(1, N = 41) = 26.56$ . p < .001. Group identification had no main or interactive effects.

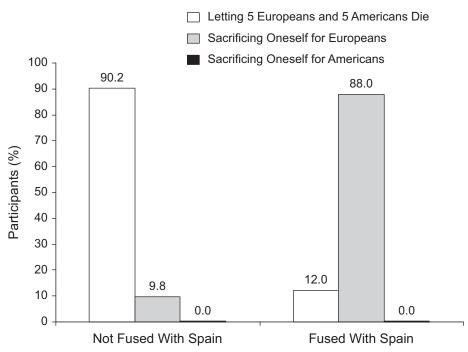
There was no evidence that prejudice moderated our findings. In particular, when we added prejudice toward Americans to the analyses, it had no main or interactive effects, ps > .49. Apparently, fused participants' feeling of kinship with Europeans was responsible for their willingness to save them; self-sacrifice was not motivated by prejudice toward Americans.

In summary, as did the results of Study 2, the results of Study 3 suggested that fused participants were compelled by their moral convictions to sacrifice themselves to save the lives of several extended-in-group members. These data contribute to an emerging picture of fused persons as possessing a sense of moral agency that compels them to sacrifice themselves for people with whom they are affiliated. It is important to note, however, that this moral agency is limited in that it does not extend to out-group members.

In the next study, we put this sense of moral agency to an even more stringent test by investigating whether fused persons are so strongly motivated to act on behalf of their group that they do so even when it serves no utilitarian purpose.

#### Study 4: Suicide-Killing for One's Group

In Study 4, we tested whether fused persons are so motivated to exert their individual agency to kill actors who threaten the in-group that they will choose to kill themselves on the group's behalf even when it is clear that someone else is poised to make the same sacrifice. To test this hypothesis, we had participants chose between allowing an in-group member to jump from a bridge to kill five terrorists or pushing the in-group member aside so that they could kill the five terrorists by jumping to their own death.



**Fig. 4.** Results from Study 3: percentage of participants who endorsed each response to the moral dilemma (letting five Europeans and five Americans die vs. sacrificing oneself to save the five Europeans vs. sacrificing oneself to save the five Americans). Results are shown separately for participants whose identities were fused with Spain and those whose identities were not fused with Spain.

#### Method

**Participants.** One hundred seventy-one Spaniards (122 women and 49 men; mean age = 36.07 years, SD = 9.64) completed this study on the Web voluntarily.

Procedure. Participants first completed measures of fusion with Spain (Swann et al., 2009) and group identification (Mael & Ashforth, 1992;  $\alpha = .85$ ). Participants were asked to imagine that it was March 11, 2004, the day when terrorists detonated several bombs in the Madrid rail system. According to the scenario, participants were standing on a footbridge over several rail tracks leaving Atocha station, the primary focal point of the attacks. Just after the bombs exploded, they saw the terrorists running on one set of tracks below. Another Spaniard was preparing to jump onto the path of an approaching train; he knew that he would die, but also knew that the train would avoid him by veering onto the track where the terrorists were running, killing them. Participants were then given the option of either allowing the other Spaniard to jump or pushing him aside and jumping to their own death, causing the train to change tracks and kill the terrorists.

#### Results and discussion

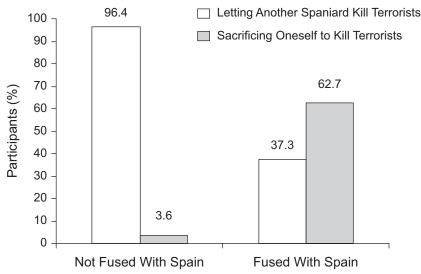
We used a binary logistic regression to examine the impact of fusion (effect coding: -1, 1), group identification (centered), and the interaction of these two variables on participants'

desire to be personally involved in killing terrorists even if it meant dying. As Figure 5 shows, a main effect of fusion emerged, b = 2.00, OR = 7.44, Wald  $\chi^2 = 44.97$ , p < .001. Fused participants preferred pushing the in-group member to the side and jumping to kill the terrorists over allowing the ingroup member to jump,  $\chi^{2}(1, N = 59) = 3.81$ . p < .05, whereas nonfused participants preferred letting the in-group member jump rather than jumping themselves,  $\chi^2(1, N = 112) = 96.57$ , p < .001. Group identification had no main or interactive effects. The results thus showed that persons who are fused with a group possess a sense of moral agency that emboldens them to take their own lives on behalf of that group, even if someone else is poised to take the very same action. Apparently, fused people not only are motivated to see that justice for the in-group is achieved, but also want to be personally involved in its implementation.

#### **General Discussion**

Whereas past research has suggested that most people are quite reluctant to personally enact extreme behaviors to save human life, we have identified one class of individuals who appear to revel in such opportunities. In particular, using an intergroup version of the trolley problem, we discovered that people who were fused with their group indicated that they would jump to their deaths in front of a runaway trolley to save the lives of members of their group. Our findings complement recent evidence of the impact of individual differences and

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**Fig. 5.** Results from Study 4: percentage of participants who endorsed each response to the moral dilemma (letting another Spaniard kill terrorists vs. sacrificing oneself to kill terrorists). Results are shown separately for participants whose identities were fused with Spain and those whose identities were not fused with Spain.

contextual variables on people's moral decisions in general (e.g., Graham, Haidt, & Nosek, 2009; Pratto & Glasford, 2008) and responses to the trolley dilemma in particular (Cikara, Farnsworth, Harris, & Fiske, 2009; Ditto, Pizarro, & Tannenbaum, 2009; Petrinovich, O'Neill, & Jorgensen, 1993).

Collectively, our findings extend previous evidence of fused people's exceptional expressed willingness to fight and die for their group (Swann et al., 2009) and of their actual progroup behavior (Swann et al., in press). Apparently, although nonfused people may know what ought to be done, fused people want to *do* it. The sense of moral agency displayed by fused persons seems motivated by identity, rather than utilitarian, considerations. When, for example, fused persons recognized that a countryman was about to sacrifice himself to kill terrorists, they endorsed pushing him aside so that they could be personally involved in the act. In this case, it was clear that the terrorists were going to die even if participants did nothing, but fused participants still insisted on sacrificing themselves.

The keen sense of moral agency associated with fusion not only mandates aggression against out-group members, but also compels self-sacrifice for members of an extended in-group. These data clash with traditional assumptions that group members experience an unmitigated bias toward individuals with whom they are most closely affiliated. By showing that the moral convictions of fused people enable them to rise above such bias to act on behalf of an extended in-group, our studies offer a novel twist on the psychology of group membership.

The willingness of fused Spaniards to sacrifice themselves to save members of an extended in-group may reflect recent events in Spain and Europe. That is, the terrorist attacks in Spain and England and the growing influence of the European Union have surely fostered a sense of shared fate with Europe among Spaniards; fused Spaniards simply possess the moral

agency to translate such feelings of solidarity into action. Alternatively, our dilemmas may have increased the salience of common external threats faced by Spaniards and Europeans (Davies, Steele, & Markus, 2008; Dovidio et al., 2004). Elevations in perceived threat may have triggered feelings of inclusiveness that extended beyond the specific in-group, and participants with a keen sense of moral agency (fused persons) expressed willingness to act on these feelings. These explanations turn on the fact that Spain is nested within Europe and therefore has many social, economic, and political linkages with the rest of Europe. It is thus not surprising that fused and nonfused Spaniards alike expressed no interest in saving Americans (members of an out-group) and that these responses were not motivated by prejudice against this group.

In conclusion, in four investigations, identity fusion moderated responses to intergroup versions of the trolley problem—and these effects were quite independent of the effects of a traditional measure of the strength of group identification. Repeatedly, fused people expressed an eagerness to translate their moral imperatives into action. Indeed, they manifested an unusually strong moral compass that compelled them to do the "right" thing—even when it meant sacrificing their own lives and even when someone else was prepared to accomplish the same ends. In an era in which the act of sacrificing one's own life for the group has had world-altering consequences, it is critical for future researchers to learn more about the psychological underpinnings of such activity.

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The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

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#### References

- 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. (2009). When I equals we: Exploring the relation between social and personal identity of extreme right-wing political party members. *British Journal of Social Psychology*, 48, 625–647.
- Branscombe, N.R., Ellemers, N., Spears, R., & Doosje, B. (1999).
  The context and content of social identity threat. In N. Ellemers,
  R. Spears, & B. Doosje (Eds.), Social identity: Context, commitment, content (pp. 35–58). Oxford, England: Blackwell.
- Cikara, M., Farnsworth, R.A., Harris, L.T., & Fiske, S.T. (2009). *On the wrong side of the trolley track: Neural correlates of relative social valuation*. Manuscript submitted for publication.
- Cushman, F., Young, L., & Hauser, M. (2006). The role of conscious reasoning and intuition in moral judgment: Testing three principles of harm. *Psychological Science*, 17, 1082–1089.
- Davies, P.G., Steele, C.M., & Markus, H.R. (2008). A nation challenged: The impact of foreign threat on America's tolerance for diversity. *Journal of Personality and Social Psychology*, 95, 308–318.
- Ditto, P.H., Pizarro, D.A., & Tannenbaum, D. (2009). Motivated moral reasoning. In D.M. Bartels, C.W. Bauman, L.J. Skitka, & D.L. Medin (Eds.), *Moral judgment and decision making* (pp. 307–338). San Diego, CA: Academic Press.
- Dovidio, J.F., ten Vergert, M., Stewart, T.L., Gaertner, S.L., Johnson, J.D., Esses, V.M., et al. (2004). Perspective and prejudice: Antecedents and mediating mechanisms. *Personality and Social Psychology Bulletin*, 30, 1537–1549.
- Durkheim, E. (1951). *Suicide* (J.A. Spaulding & G. Simpson, Trans.). New York: Free Press. (Original work published 1897)
- Foot, P. (1967). The problem of abortion and the doctrine of double effect. Oxford Review (Trinity), 5, 5–15.
- Graham, J., Haidt, J., & Nosek, B.A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology*, 96, 1029–1046.
- Greene, J.D., Cushman, F.A., Stewart, L.E., Lowenberg, K., Nystrom, L.E., & Cohen, J.D. (2009). Pushing moral buttons: The interaction between personal force and intention in moral judgment. *Cognition*, 111, 364–371.
- Greene, J.D., Sommerville, R.B., Nystrom, L.E., Darley, J.M., & Cohen, J.D. (2001). An fMRI investigation of emotional engagement in moral judgment. *Science*, 293, 2105–2108.

- Haddock, G., Zanna, M.P., & Esses, V.M. (1993). Assessing the structure of prejudicial attitudes: The case of attitudes toward homosexuals. *Journal of Personality and Social Psychology*, 65, 1105–1118.
- Hewstone, M., Rubin, M., & Willis, H. (2002). Intergroup bias. *Annual Review of Psychology*, *53*, 575–604.
- James, W. (1890). The principles of psychology (2 vols.). New York: Henry Holt & Co.
- Klandermans, B., Sabucedo, J.M., Rodriguez, M., & de Weerd, M. (2002). Identity processes in collective action participation: Farmers' identity and farmers' protest in the Netherlands and Spain. *Political Psychology*, 23, 235–251.
- 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.
- Pedahzur, A. (2005). Suicide terrorism. Cambridge, England: Polity Press.
- Petrinovich, L., O'Neill, P., & Jorgensen, M.J. (1993). An empirical study of moral intuitions: Towards an evolutionary ethics. *Journal of Personality and Social Psychology*, 64, 467–478.
- Pratto, F., & Glasford, D.E. (2008). Ethnocentrism and the value of a human life. *Journal of Personality and Social Psychology*, 95, 1411–1428.
- Schubert, T.W., & Otten, S. (2002). Overlap of self, in-group and outgroup: Pictorial measures of self-categorization. *Self and Identity*, 1, 353–376.
- Simon, B., & Klandermans, B. (2001). Politicized collective identity: A social psychological analysis. *American Psychologist*, 56, 319–331.
- 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.
- Swann, W.B., Jr. (1983). Self-verification: Bringing social reality into harmony with the self. In J. Suls & A.G. Greenwald (Eds.), Social psychological perspectives on the self (Vol. 2, pp. 33–66). Hillsdale, NJ: Erlbaum.
- Swann, W.B., Jr. (in press). Self-verification theory. In P. Van Lang, A. Kruglanski, & E.T. Higgins (Eds.), *Handbook of theories of social psychology*. London: Sage.
- Swann, W.B., Jr., Gómez, Á., Huici, C., Morales, F., & Hixon, J.G. (in press). Identity fusion and self-sacrifice: Arousal as catalyst of pro-group fighting, dying and helping behavior. *Journal of Per-sonality and Social Psychology*.
- Swann, W.B., Jr., Gómez, Á., Seyle, C.D., Morales, J.F., & Huici, C. (2009). Identity fusion: The interplay of personal and social identities in extreme group behavior. *Journal of Personality and Social Psychology*, 96, 995–1011.
- Tajfel, H., & Turner, J.C. (1979). An integrative theory of intergroup conflict. In W.G. Austin & S. Worchel (Eds.), *The social psychol*ogy of intergroup relations (pp. 33–47). Monterey, CA: Brooks-Cole.
- Turner, J.C., Hogg, M.A., Oakes, P.J., Reicher, S.D., & Wetherell, M.S. (1987). Rediscovering the social group: A self-categorization theory. Oxford, England: Basil Blackwell.