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What is This?

Rejected and Excluded Forevermore, but Even More Devoted: Irrevocable Ostracism Intensifies Loyalty to the Group Among Identity-Fused Persons

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Abstract

When people are ostrasized (i.e., rejected and excluded) by either an outgroup or an ingroup, they may either withdraw or engage in compensatory activities designed to reaffirm their social identity as a group member. The authors proposed here that individual differences in identity fusion (an index of familial orientation toward the group) would moderate the tendency for people to display such compensatory activity. Consistent with this reasoning, the results of four experiments showed that irrevocable ostracism increased endorsement of extreme, pro-group actions (fighting and dying for the ingroup) among fused persons but not among nonfused persons. This effect emerged when an outgroup ostracized fused individuals due either to their nationality (Experiment 1) or their personal preferences (Experiment 2). Similarly, ostracism by the ingroup amplified the tendency for fused persons to both endorse extreme pro-group actions, refuse to leave the group (Experiment 3), and donate money to an ingroup member (Experiment 4). Finally, compensatory activities emerged even when ostracism was based on being "too good" for the group, suggesting that a desire for self-enhancement does not mediate such activities (Experiment 4).

Keywords

identity fusion, social identity, ostracism, self-verification, identification

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Ostracism hurts. Given this, it might seem that people would cope with the pain of ostracism by passively "licking their wounds." Alternatively, victims of ostracism might even actively distance themselves from the group that led to, or actually perpetrated, the rejection. Nevertheless, some targets of ostracism display the opposite reaction, engaging in compensatory activity designed to reaffirm the identity that has been challenged. Our primary goal here is to better understand these contrasting reactions to ostracism by specifying the characteristics of those who display each one. Specifically, we propose that people who report being fused with their group will display compensatory pro-group activities but nonfused persons will fail to do so. We propose further that such compensatory displays are highly robust, occurring even when the ostracism is irrevocable, and despite variations of the source, the ostensible reason underlying the ostracism, or the response class under scrutiny. To explain why fusion displays these properties, we consider the nature of ostracism, identity fusion, and the relation between the two.

Social Ostracism and Identity Fusion

Researchers have systematically pondered the effects of ostracism (i.e., being rejected and excluded by one's group) for decades (e.g., Breakwell, 1979; Jetten, Branscombe, Spears, & McKimmie, 2003; Levine & Kerr, 2007; Lewin, 1948; Noel, Wann, & Branscombe, 1995; Tajfel, 1978; Williams, 1997). This work has borne considerable fruit. Not only is it known that ostracism is psychologically painful, but it is also believed that ostracism activates the same brain regions that underlie the experience of physical pain (e.g., Eisenberger, Lieberman, & Williams, 2003).

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Presumably, ostracism is traumatizing because it imperils a bevy of human needs served by group membership: belongingness, self-enhancement, control, and meaningful existence and recognition by others (e.g., Williams, 2007). Given this, it makes sense that people's immediate reaction to ostracism is often to take active steps to win the approval of the ingroup (Baumeister & Leary, 1995; Jamieson, Harkins, & Williams, 2010; Maner, DeWall, Baumeister, & Schaller, 2007; Williams, Cheung & Choi, 2000; Williams & Sommer, 1997). Yet some people respond to ostracism by distancing themselves from the group that led to, or actually perpetrated, the rejection. Such distancing may take the form of derogating the source of the rejection (Bourgeois & Leary, 2001), displaying no interest in continuing working with the rejectors (Pepitone & Wilpizeski, 1960), or responding aggressively or violently to the source of the rejection (Leary, Kowalski, Smith, & Phillips, 2003; Leary, Springer, Negel, Ansell, & Evans, 1998; Warburton, Williams, & Cairns, 2006). In this report, we suggest that identity fusion is a key moderator of such reactions to ostracism; whereas people who are fused with the group will display compensatory activity, those who are not fused with the group will fail to display such activity.

Identity fusion occurs when people feel that their personal self is merged with a social self. Such mergers are associated with a profound, familial connection to the group and its members. These types of connections entail feelings of obligation to sacrifice for the group, together with confidence that other group members will feel similarly obligated. Fusion may take two different forms. In *local fusion*, people fuse with group members with whom they have direct contact and personal relationships. In *extended fusion*, people project familial ties onto group members with whom they have little or no direct contact. In this article, we examine how extended fusion with one's country influences people's reactions to ostracism by an outgroup or ingroup.

Identity fusion is related to, but distinct from, group identification, the index of alignment with groups featured in many prominent analyses of group processes, including social identity theory (e.g., Tajfel & Turner, 1979), selfcategorization theory (e.g., Turner, Oakes, Haslam, & McGarty, 1994), and intergroup relations theory (Mackie, Devos, & Smith, 2000; Mackie, Smith, & Ray, 2008; E. R. Smith, Seger, & Mackie, 2007). Identification is characterized by a relatively impersonal affinity for the group category based on the perception of similarities to prototypical properties of that category (e.g., shared qualities or outcomes, commitment to a common goal). In fact, in the widely used minimal-group paradigm, participants become identified with and biased toward the group despite never having encountered a single group member (e.g., Billig & Tajfel, 1973; Turner, Sachdev, & Hogg, 1983). Not surprisingly, then, the pro-group sentiments of highly identified persons are directed toward the abstract category rather than individual members of the category (e.g., Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987).

Highly identified persons, then, are characterized by what Brewer and Gardner (1996) referred to as *collective* ties to the group (see also Prentice, Miller, & Lightdale's, 1994, discussion of "common-identity" groups). In contrast, highly fused persons are not only bound to the collective, but they also feel familial ties to other group members (see also Aron, Aron, Tudor, & Nelson, 1991; Markus & Kitayama, 1991). These feelings of family give rise to the assumption that all group members are obligated to work for the benefit of the group. In turn, this assumption invokes people's feelings of agency for the group and the expectation that group members will work together to strengthen the group and make it relatively invulnerable. The result is a powerful desire to act on behalf of the group, most strikingly when extreme action is required.

Recent research suggests that fusion with one's country predicts a host of pro-group behaviors, including expressed willingness to fight and die for their group (e.g., Gómez et al., 2011; Swann, Gómez, Seyle, Morales, & Huici, 2009), donation of personal funds to the group, and quality of motor activity undertaken on behalf of the group (Swann, Gómez, Huici, Morales, & Hixon, 2010). Fused persons even express willingness to plunge themselves in front of a speeding trolley for their group (Gómez et. al., 2011; Swann, Gómez, Dovidio, Jetten & Hart, 2010). Furthermore, all of these effects of fusion emerged while controlling for group identification.

Identity fusion can be measured by a modified version of a pictorial scale (Inclusion of Other in Self scale [IOS]) that was originally developed to assess attachment in close relationships (Aron, Aron, & Smollan, 1992). Composed of a series of pictures that represent different degrees of overlap between the self and other, the IOS was conceptualized as a measure of the degree to which people possess a "sense of being interconnected with another" (Aron et al., 1992, p. 598). Several group researchers (Coats, Smith, Claypool, & Banner, 2000; Schubert & Otten, 2002; E. R. Smith & Henry, 1996; Tropp & Wright, 2001; Young, Bernstein, & Claypool, 2009) used the IOS or adapted versions of it to capture alignment of respondents with groups. Swann et al. (2009) further modified this measure by creating a scale in which participants selected from among five pictures the one that best represented their relationship with the group (see Figure 1). Scores on the scale 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," and nonfused persons selecting the other four (for a verbal measure of fusion, see Gómez et. al., 2011).

Because fused persons theoretically experience feelings of connectedness and reciprocal strength with the group, they will not only equate ostracism of their ingroup with personal ostracism, but they will also perceive both forms of ostracism as an identity threat (see, e.g., Branscombe, Ellemers, Spears, & Doosje's, 1999; Ellemers, Spears, & Doosje's, 2002,

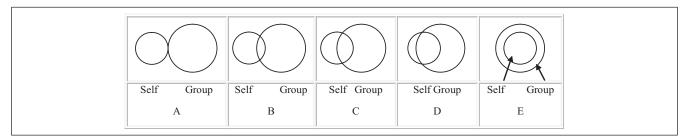


Figure 1. Measure of identity fusion (Swann, Gómez, Seyle, Morales, & Huici, 2009)

discussions of "acceptance threat"). When people encounter threats to their identities, self-verification theory (Swann, 1983, 2011) states that they should engage in compensatory attempts to reaffirm that identity (e.g., Brooks, Swann, & Mehta, 2011; Swann & Hill, 1982; Swann & Read, 1981). As such, fused persons who are irrevocably ostracized should increase their endorsement of activities that will reaffirm their group identity (e.g., pro-group activity). In contrast, because nonfused people perceive themselves as somewhat distinct from the group, ostracism will have relatively little bearing on their loyalty to the group. For this reason, nonfused individuals will refrain from displaying compensatory activity in the wake of ostracism (e.g., Williams & Zadro, 2005).

In this article, we report four experiments that are designed to explore the link between ostracism and the compensatory pro-group activity of persons who are fused with their country. First, we proposed that because fused people perceive the group as an externalization of the personal self, an outgroup's rejection of such individuals due to their nationality should trigger compensatory pro-group activity (Experiment 1). Second, for fused participants, rejection due to nationality should be just as likely to trigger compensatory activity as rejection due to personal failings (Experiment 2). Third, even when the *ingroup* ostracizes fused persons (due to personal failings), the individuals should compensate by displaying elevated endorsement of progroup behavior and desire to remain in the group (Experiment 3). Fourth, even when the ingroup ostracizes fused persons due to their being *over* qualified for group membership (and therefore do not constitute an ego threat), ostracism should trigger compensatory activity (Experiment 4). Fifth, rejection due to overqualification should amplify compensatory activity within several distinct response modalities, including not only fighting for the ingroup but also helping the ingroup by donating money. In contrast, all of the foregoing forms of ostracism should not increase the tendency for nonfused people to endorse pro ingroup activity. Finally, we expected that all of these effects would emerge while controlling for group identification.

Overview of the Four Experiments

All experiments were conducted online in two waves. During the first wave, participants completed Swann et al.'s (2009) pictorial measure of identity fusion. In addition, they

completed Mael and Ashforth's (1992) Identification Scale. ¹ These measures were completed in counterbalanced order with reference to the group "Spain." All experiments were conducted in Spain (at Universidad Nacional de Educación a Distancia [UNED]) because the relatively high rate of fusion with country displayed by Spaniards (approximately 30%-40%) obviated the large samples that would be necessary in countries with lower fusion rates. For example, Swann et al. (2009) reported that fusion with the country among U.S. citizens was approximately 20%.

During Wave 2, we set the stage for the cyberostracism manipulation (Williams at al., 2000), modifying a procedure developed by Nezlek, Kowalski, Leary, Blevins, and Holgate (1997). Participants learned that they were going to participate in an online chat session with other students. This was very plausible to our participants because UNED is an extension university and the Internet is the primary mode of communication between students. Note that unlike some previous manipulations of ostracism (e.g., Dotan-Eliaz, Sommer, & Rubin, 2009; Williams & Sommer, 1997), in all experiments in this article the ostracism manipulation was irrevocable in that participants learned that they would never have opportunity to be included in the group. After the ostracism manipulation, participants completed manipulation checks and outcome measures.

Experiment I: Ostracism by an Outgroup Due to Nationality

Method

Participants. Undergraduates (N=86; 55 female, 31 male; mean age = 33.42, SD=9.52) enrolled in UNED completed this research for course credit. Although there was a modest positive correlation between fusion and identification, r(84) = .42, p < .001, the variance inflation factors in all analyses reported in this article were always lower than 10 (i.e., \leq 3.34), diminishing concerns with multicollinearity. Finally, 41.9% of the participants indicated that they were fused with Spain.

As in earlier identity fusion research, in Experiments 1-4, fusion was treated as a dichotomous variable, such that participants were considered fused only if they endorsed the

option in which the self was completely overlapping with the group (the "E" option). Justification for this strategy is offered by evidence that the bimodality test for the fusion measure was significant (> .55) in all experiments.

Procedure

In Experiments 1-4, in Wave 1, participants completed the measures of alignment with the group. There was then an 8-s delay, followed by Wave 2. To set the stage for the ostracism manipulation, participants learned that they were going to participate in a chat session with other European students, none of whom happened to be from Spain. Participants learned that participants were to suggest topics to discuss during the chat session as well as the nationalities they would most like to see represented among members of the chat session. After participants supplied this information, the computer indicated that it was processing the information.

After 8 s, participants were randomly assigned to either the inclusion or ostracism conditions. Participants in the inclusion condition learned that most of the European students were interested in having a Spaniard join the chat group. Here, and in all experiments that incorporated an inclusion condition, the dependent measures were incorporated in a brief questionnaire that participants completed before starting the chat session. In contrast, participants in the ostracism condition were informed that none of the European students were interested in having a Spaniard in the chat group; as a result, the participant was excluded from the chat session. Participants in the ostracism condition then chose three additional topics that the experimenter then ostensibly showed to the other Europeans. After 8 s, they learned once again that no one wanted a Spaniard in the discussion group. After the second rejection, participants in the ostracism condition were assured that although they would not be participating in a chat session, they would receive course credit for their participation after completing an additional questionnaire.

Endorsement of extreme actions for the group. Participants completed the measure of endorsement of extreme actions for the group developed by Swann et al. (2009) on 7-point scales ranging from –3 (totally disagree) to 3 (totally agree). For the measure of willingness to fight for the group, participants rated their agreement with five items (e.g., "I would fight someone physically threatening another Spaniard"). For the measure of willingness to die for the group, participants indicated their agreement with two items (e.g., "I would sacrifice my life if it saved another group member's life"). Because the seven items were conceptually overlapping and highly correlated ($\alpha = .92$), we summed them into a single index of extreme actions. Also, to test the generality of our effects, in Experiments 2 and 4 we changed the range of the scale from -3 to +3 to from 0 to 6. To facilitate comparison of scores across experiments, we standardized them before entering them into the analyses.

Check on effectiveness of ostracism manipulation. To determine whether participants felt excluded and ignored, participants rated their agreement with a series of six items on 7-point scales ranging from 0 (totally disagree) to 6 (totally agree). The three items in the Perceived Exclusion scale focused on the extent to which participants felt excluded: rejected, excluded, and unequally treated (α = .88). The three items in the Felt Ignored scale focused on the extent to which participants felt ignored: not considered, ignored, and isolated (α = .89). Although scores on the Perceived Exclusion and Felt Ignored scales were correlated (r = .86), we analyzed them separately as in previous ostracism research (e.g. Williams, 1997, 2007).

We performed a multiple regression analysis on the Perceived Exclusion scale using ostracism condition, fusion, identification, all two-way interactions, and the triple interaction. Both ostracism condition and fusion were effects coded (-1, 1) and, as suggested by Aiken and West (1991), identification was centered. The multiple regression revealed a main effect of the ostracism manipulation, B = -.67, t(78) = -3.89, p < .001, such that participants in the ostracism condition felt more rejected than participants in the inclusion condition (M = 1.93, SD = 1.65vs. M = .46, SD = .99). No other significant effects emerged from this analysis. Also as predicted, the regression on the Felt Ignored scale revealed a main effect of the ostracism manipulation, B = -.59, t(78) = -3.21, p < .01, such that participants in the ostracism condition felt more ignored than participants in the inclusion condition (M = 1.83, SD = 1.72 vs. M = .51, SD = .511.09). No other significant effects emerged.

Perceived reason for ostracism. On 7-point scales ranging from 0 (totally disagree) to 6 (totally agree), two items asked participants to indicate why they believed they were rejected, with one asking if it was because they were Spaniards and another asking if it was because of the topic they chose. As expected, a t test indicated that participants perceived that they were ostracized or included because they were Spaniards (M = 3.28, SD = 1.26) rather than because of the topic they chose (M = 2.27, SD = 1.57), t(85) = -4.84, p < .001. A multiple regression analysis revealed no main or interactive effects of our predictor variables on responses to these items.

Results

To determine whether fusion and ostracism interactively predicted endorsement of extreme behaviors while controlling for identification, we performed a series of multiple regressions using ostracism condition, fusion, identification, all two-way interactions, and the triple interaction as predictors and endorsement of extreme actions for the group as the criterion. The expected interaction between fusion and ostracism emerged, B = -.25, t(78) = -2.11, p < .05. As shown in Figure 2, fused participants endorsed more extreme actions for the group when they were ostracized than when they were included (M = .99, SD = .58 vs. M = .22, SD = 1.19.), B = -.38, t(84) = -2.30, p < .05. However, ostracism had no impact on nonfused participants (M = -.44, SD = .81 vs.

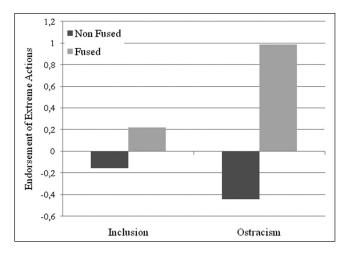


Figure 2. Extreme actions for the group as a function of identity fusion and ostracism, Experiment I

M = -.15, SD = .83), B = .12, t(84) = .84, p > .40, nor did fused participants differ from nonfused participants in the inclusion condition, B = .10, t(84) = .67, p = .51. Although it is not clear why the inclusion manipulation muted the effects of fusion, it may be that inclusion reduces the perception of threat, which in turn reduces the need to defend one's country. We will return to this issue later.

In addition, the regression analysis yielded a main effect of fusion B = .36, t(78) = 3.09, p < .01. Fused participants endorsed more extreme actions for the group than did nonfused participants (M = .40, SD = 1.09 vs. M = -.29, SD = .82). Identification had no main or interactive effects. Moreover, none of the effects reported above were qualified by any higher order interactions.

Discussion

The results of Experiment 1 revealed that when an outgroup ostracized the participant based on nationality, fused participants endorsed more extreme actions for the ingroup, but nonfused participants had no such reaction. Moreover, the ostracism manipulation interacted with fusion but not with identification, confirming earlier evidence that fusion and identification measures tap different constructs. Experiment 2 was designed to extend this evidence that ostracism amplifies the tendency for fused persons to endorse extreme pro-group activity by testing the notion that ostracism due to personal preferences has the same impact as ostracism due to nationality.

Experiment 2: Ostracism by an Outgroup Due to Nationality or Personal Preferences

Method

Participants. Undergraduates (N = 460; 372 female, 88 male; mean age = 32.10, SD = 8.99) enrolled in UNED

completed this research for course credit. The correlation between fusion and identification ($\alpha = .71$) was positive but modest, r(458) = .35, p < .001. Finally, 32.6% of our participants indicated that they were fused with Spain.

Procedure

The procedure was similar to Experiment 1 except that in addition to the inclusion and the ostracism-due-to-nationality conditions, we added a new condition in which ostracism was ostensibly due to the participant's personal preferences. Participants in the *ostracism-due-to-personal-preferences* condition were informed that none of the other Europeans had chosen any of the topics the participants had listed, which meant that no one wanted to be in the chat session with them. Rejected once, they then received an opportunity to choose three different topics, which were then rejected for a second and final time. Participants then completed the same measures of endorsement of extreme actions for the group ($\alpha = .77$) and manipulation checks used in Experiment 1.

Check on effectiveness of ostracism manipulation. In all of our analyses, we wished to contrast the inclusion condition with the ostracism-due-to-personal-preferences condition and the ostracism-due-to-nationality condition. To this end, we first assigned the following weights to each condition: $-2 = inclusion \ condition$, $+1 = ostracism-due-to-personal-preferences \ condition$, and $+1 = ostracism-due-to-nationality \ condition$. We then conducted multiple regressions on each of the manipulation checks that included the following predictors: the ostracism manipulations (contrast coded, -2, +1, +1), identification (centered), fusion (contrast coded, -1, 1), and the corresponding two- and three-way interactions.

The regression of the Perceived Exclusion scale (α = .88) revealed a main effect of the manipulation, B = .53, t(452) = -11.38, p < .001, such that participants in the ostracism-due-to-personal-preferences condition felt more excluded than participants in the inclusion condition (M = 1.91, SD = 1.32 vs. M = .46, SD = .72), t(326) = 12.17, p < .001, and participants in the ostracism-due-to-nationality condition also felt more excluded than participants in the inclusion condition (M = 2.09, SD = 1.43), t(288) = 12.49, p < .001. The two ostracism conditions did not differ, t(300) = 1.13, p > .25. No other significant effects emerged from the analysis, ps > .13.

The regression of the Felt Ignored scale (α = .84) also revealed a main effect of the manipulation, B = .41, t(452) = 9.05, p < .001, such that participants in the ostracism-due-to-personal-preferences condition felt more ignored than participants in the inclusion condition (M = 1.75, SD = 1.22, vs. M = .58, SD = .86), t(326) = 9.99, p < .001, and participants in the ostracism-due-to-nationality condition also felt more ignored than participants in the inclusion condition (M = 1.84, SD = 1.30), t(288) = 9.82, p < .001. The two ostracism conditions did not differ, t(300) = .57, p > .56. No other significant effects emerged from the analysis, ps > .20.

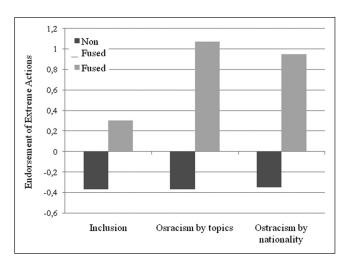


Figure 3. Extreme actions for the group as a function of identity fusion and ostracism, Experiment 2

Results

To determine whether fusion and ostracism interactively predicted endorsement of extreme actions while controlling for identification, we performed multiple regression analyses parallel to those conducted on the manipulation checks. The predictors were the ostracism manipulations (contrast coded, -2, +1, +1), fusion (contrast coded, -1, +1), identification (centered), and all two- and three-way interactions.

The predicted interaction between fusion and the manipulation emerged, B = .14, t(452) = 4.45, p < .001. As shown in Figure 3, fused participants endorsed more extreme actions for the group in the ostracism-due-to-personal-preferences than in the inclusion condition (M = 1.07, SD = 1.25 vs. M = .30, SD = .92 respectively), B = .32, t(458) = 3.17, p < .01. Fused participants also endorsed more extreme actions for the group in the ostracism-due-to-nationality than in the inclusion condition (M = .95, SD = 1.39), B = .34, t(458) = 3.59, p < .001. The two exclusion conditions, however, did not differ, B = -.06, t(458) = -.61, p = .54. Moreover, ostracism had no impact on the responses of nonfused participants, ps > .90.

In addition, the regression analysis yielded a main effect of fusion B = .46, t(452) = 10.05, p < .001. Fused participants endorsed more extreme actions for the group than did nonfused participants (M = .76, SD = 1.24 vs. M = -.37, SD = .57). A main effect of identification, B = .26, t(452) = 5.36, p < .001, indicated that as identification increased, so did endorsement of extreme actions for the group. Finally, a main effect of the manipulation, B = .14, t(452) = 4.27, p < .001, indicated that participants endorsed more extreme actions for the group in the ostracism conditions than in the control condition (M = .08, SD = 1.09 vs. M = -.15, SD = .78). No other interactive effects were found, ps > .10.

Discussion

Experiment 2 replicated and extended the results of Experiment 1. In both experiments, fused participants endorsed more extreme actions for the ingroup when an outgroup ostracized them. Moreover, this pattern emerged whether the cause for the ostracism was nationality (which threatened a social self-view) or personal preferences (which threatened a personal self-view). In contrast, nonfused participants displayed little reaction to ostracism. As in Experiment 1, the ostracism manipulation interacted with fusion but not with identification, therefore adding support to our assumption that the two measures tap different constructs.

In both of the first two experiments, participants were excluded by an outgroup. The ostracism manipulation may have consequently inspired "us—them" sentiments that encouraged participants to rally around their ingroup. If so, the tendency for fused persons to endorse extreme pro-group behavior may have reflected a desire to symbolically aggress against the outgroup rather than to stand behind the ingroup. In an effort to rule out this possibility, we conducted a third experiment in which participants were ostracized by their ingroup. To determine whether the effects of fusion and ostracism would generalize to a novel outcome measure, we also added a measure of desire to remain in the group (i.e., social mobility).

Experiment 3: Ostracism of the Individual by the Ingroup

Method

Participants. Undergraduates (N = 194; 153 female, 41 male; mean age = 34.22, SD = 9.27) enrolled in UNED completed this research for course credit. The correlation between fusion and identification ($\alpha = .82$) was positive but modest, r(192) = .34, p < .001. Finally 33% of our participants indicated that they were fused with Spain.

Procedure

The procedure was similar to that used in the inclusion and ostracism-due-to-personal-preferences conditions of Experiment 2 except that the source of the ostracism was other UNED undergraduates. For the dependent measures, participants completed the same measure of endorsement of extreme actions as in Experiments 1 and 2 (α = .84) and a measure of *social mobility* or desire to leave the group. Social mobility was measured using a three-item scale. On 7-point scales ranging from 0 (*totally disagree*) to 6 (*totally agree*), participants rated their agreement with the following items: "Sometimes I think that I would like being a citizen of another country," "I would prefer not to be a Spaniard," and "If I could change my nationality, I would do it" (α = .83).

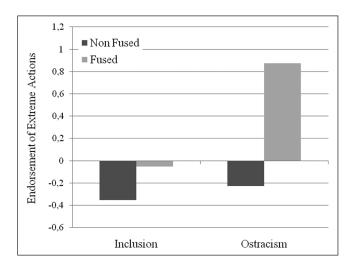


Figure 4. Extreme actions for the group as a function of identity fusion and ostracism, Experiment 3

Check on effectiveness of ostracism manipulation. The Felt Ignored and Perceived Exclusion scales ($\alpha s = .88, .89$) were entered into multiple regressions in which the predictors were fusion, ostracism, and identification; all two-way interactions; and the triple interaction. Both fusion and ostracism were contrast coded (-1 and 1) and identification was centered. As expected, the regression of the Perceived Exclusion scale revealed a main effect of the ostracism manipulation, B = -.52, t(186) = -4.47, p < .001, such that participants in the ostracism condition felt more excluded than participants in the inclusion condition (M = 1.56, SD = 1.57 vs. M = .47, SD = .73). No other significant effects emerged from the analysis. Also as predicted, the regression of the Felt Ignored scale revealed a main effect of the ostracism manipulation, B = -.53, t(186) =-4.67, p < .001, such that participants in the ostracism condition felt more ignored than participants in the inclusion condition (M = 1.64, SD = 1.48 vs. M.55, SD = .89). No other significant effects emerged.

Results

To determine whether fusion and ostracism interactively predicted endorsement of extreme actions for the group while controlling for identification, we performed a multiple regression analysis. The predictors were fusion, ostracism, and identification; all two-way interactions; and the triple interaction and endorsement of extreme actions for the group as the outcome. Both fusion and ostracism were contrast coded (–1, 1) and identification was centered.

The predicted interaction between fusion and ostracism emerged, B = -.22, t(186) = -2.86, p < .01. As shown in Figure 4, fused participants endorsed more extreme actions for the group in the ostracism than in the inclusion condition (M = .88, SD = 1.20 vs. M = -.05, SD = .80), B = .61, t(192) = 5.12, p < .001. However, ostracism had no impact on the

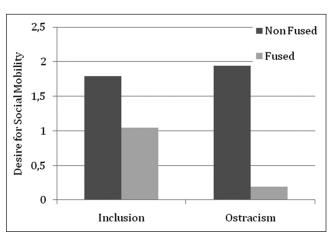


Figure 5. Social mobility as a function of identity fusion and ostracism, Experiment 3

responses of nonfused participants (M = -.23, SD = .79 vs. M = -.35, SD = .77), B = .01, t(192) = .14, p > .88.

In addition, the regression analysis yielded a main effect of fusion, B = .36, t(186) = 4.61, p < .001. Fused participants endorsed more extreme actions for the group than nonfused participants (M = .55, SD = 1.16 vs. M = -.27, SD = .78). Finally, we also found an effect of the ostracism manipulation, B = -.31, t(186) = -4.04, p < .001. Participants in the ostracism condition endorsed more extreme actions for the group than participants in the inclusion condition (M = 15, SD = 1.08 vs. M = -.26, SD = .79). Identification had no main or interactive effects. Moreover, none of the effects reported above were qualified by any higher order interactions.

To determine whether fusion and ostracism interactively predicted social mobility while controlling for identification, we performed a multiple regression analysis with the same predictors used in the analysis of endorsement of extreme actions for the group. The predicted interaction between fusion and ostracism emerged, B = .25, t(186) = 2.55, p < .01. As shown in Figure 5, fused participants expressed less desire for social mobility in the ostracism than in the inclusion condition, B = -.70, t(192) = -4.40, p < .001. However, ostracism had no impact on the responses of nonfused participants, B = -.20, t(192) = -1.69, p > .09. In addition, the regression analysis yielded a main effect of fusion, B = -.57, t(186) = -5.78, p < .001. Fused participants expressed less desire for social mobility than non-fused participants (M =.48, SD = .82 vs. M = 1.88, SD = 1.26). No other significant main nor interaction effects emerged.

Discussion

Our findings revealed that fused participants who were ostracized by their ingroup endorsed more extreme actions for the group and expressed less desire to abandon it than those who were included by their ingroup. In contrast, the

ostracism manipulation had no impact on nonfused participants; instead, across all conditions, their endorsement of extreme actions for the group remained uniformly low and their willingness to leave the group remained relatively high. Furthermore, the ostracism manipulation interacted with fusion but not with identification, thus supporting our assumption that the two measures tap fundamentally different constructs. In summary, the results of Experiment 3 indicate that when the ingroup threatens fused persons with personal ostracism, they will intensify their efforts to be exemplary group members by amplifying their endorsement of pro-group behavior as well as their resolve to remain in the group.

The first three experiments offer converging evidence that fused persons uniquely respond to social ostracism through compensatory, pro-group behavior. This effect seems robust in that it emerged whether participants were ostracized by an outgroup because of their nationality or by an ingroup because of their personal preferences, and it influenced amplified endorsement of extreme actions for the group as well as resolve to remain in the group. To further establish the generality of our findings, in Experiment 4 we determined whether the interactive effects of ostracism and identity fusion would extend to a response class not measured in the first three experiments, namely, helping the group through a donation of one's personal funds. In addition, to illuminate the mediators of fusion effects, we manipulated ostracism by informing participants that their performance overqualified them for inclusion in the group. We reasoned that if self-enhancement strivings mediated our effects, individuals who were excluded for being overqualified would be enhanced and hence feel no need to buttress their group membership by amplifying their pro-group behavior. In this case, ostracism due to overqualification would promote less, rather than more, pro-group behavior. In contrast, if the effects of fusion are mediated by processes other than a desire to bolster self-esteem, fused individuals should show elevated levels of pro-group behavior even when ostracism is due to being "too good" for the group.

Experiment 4: Ostracism of the Individual Due to Overqualification

Method

Undergraduates (N = 86; 48 female, 38 male; mean age = 32.92, SD = 10.29) enrolled in UNED completed this research for course credit. The correlation between fusion and identification ($\alpha = .91$) was positive but modest, r(84) = .32, p < .01. Finally, 27.9% of our participants indicated they were fused with Spain.

The procedure resembled that used in Experiments 1-3 except that at the beginning of Wave 2, participants learned that during the second wave they would have an opportunity to participate in a chat session with several other students.

The goal of the chat session was ostensibly to identify strategies for resolving Spain's current economic crisis. In addition, participants learned that to be included in an appropriate chat session, they should complete an "aptitude test" that consisted of a series of nine exercises with different levels of difficulty.

After participants completed the aptitude test or 20 min had passed, they were informed that their performance would be scored while they completed a brief filler task. Next, participants in the inclusion condition learned that their score was well above average and that they would therefore be included in a chat session with an appropriate group after completing some additional questionnaires. Participants in the exclusion condition were also informed that they scored well above average, but that because no other group members displayed similarly high levels of competence, they would be excluded from the chat session. Participants in the control condition were informed that they would receive the final score after completing the remainder of the questionnaire. All participants then completed the dependent measures.

Endorsement of extreme actions for the group. Participants completed the usual measure of willingness to fight and die for the group ($\alpha = .92$).

Donation. After completing the measure of endorsement of extreme behavior, participants learned that due to a substantial grant, they would have an excellent chance of winning a prize for a trip worth 600 euros. Participants then learned that if they did win the prize, they would have the opportunity to donate all or part of the money (and taking a cheaper trip) to a needy Spaniard fund. They then indicated the percentage of their potential prize money they wished to donate

Self-esteem. Participants completed a shortened version of the Heatherton and Polivy (1991) scale, the most widely used measure of state self-esteem available. More specifically, we included only seven items from the Performance subscale (i.e. "I feel confident about my abilities"; $\alpha = .70$), and seven items from the Social subscale (i.e. "I am worried about whether I am regarded as a success or failure" [reverse scored]; $\alpha = .72$). Both subscales were positive but moderately correlated, r(84) = .41, p < .001.

Check on effectiveness of ostracism manipulation. To determine whether participants felt excluded and ignored, we used the same Perceived Exclusion and Felt Ignored scales as in Experiments 1-3 (α s = .79 and .82, respectively). Scores on the Perceived Exclusion and Felt Ignored scales were highly correlated (r = .75).

In all of our analyses, we wished to contrast the ostracism condition with the inclusion condition and the control condition. We accordingly assigned the following weights to each condition: $-2 = ostracism \ condition$, $+1 = inclusion \ condition$, and $+1 = control \ condition$. We then conducted multiple regressions on both manipulation checks that included the following predictors: the ostracism manipulation (contrast

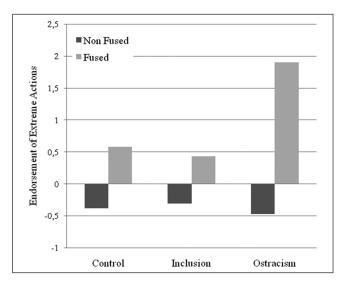


Figure 6. Extreme actions for the group as a function of identity fusion and ostracism, Experiment 4

coded, -2, +1, +1), identification (centered), fusion (contrast coded -1, 1), and the corresponding two- and three-way interactions.

The regression of the Perceived Exclusion scale revealed a main effect of the ostracism manipulation, B = -.62, t(78)=-5.93, p < .001, such that participants in the ostracism condition felt more excluded than participants in the inclusion condition (M = 2.17, SD = .61 vs. M = .59, SD = .68), t(51) =8.92, p < .001, and participants in the control condition (M =.81, SD = .83), t(58) = 7.09, p < .001. The inclusion and the control conditions did not differ, t(57) = 1.08, p > .28. No other significant effects emerged from the analysis, ps > .15. The regression of the Felt Ignored scale also revealed a main effect of the manipulation, B = -.90, t(78) = -6.00, p < .001, such that participants in the ostracism condition felt more ignored than participants in the inclusion condition (M =2.54, SD = .85 vs. M = .83, SD = 1.32), t(51) = 5.61, p < .001, and participants in the control condition (M = .76, SD = .82), t(58) = 8.28, p < .001. The inclusion and control conditions did not differ, t(57) = -.27, p > .78. No other significant effects emerged from the analysis, ps > .23.

Results

To determine whether fusion and ostracism interactively predicted endorsement of extreme actions and donation while controlling for identification, we performed multiple regression analyses parallel to those conducted on the manipulation checks. The predictors were the ostracism manipulation (contrast coded, -2, +1, +1), fusion (contrast coded, -1, +1), identification (centered), and all two- and three-way interactions.

Endorsement of extreme actions for the group. The predicted interaction between fusion and the ostracism manipulation

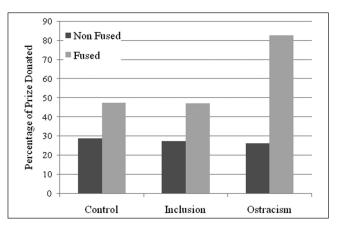


Figure 7. Donations as a function of identity fusion and ostracism, Experiment 4

emerged, B = -.34, t(78) = -3.21, p < .01. As shown in the right side of Figure 6, fused participants in the ostracism condition endorsed more extreme actions for the group than did fused participants in the inclusion condition (M = 1.90, SD = 1.34 vs. M = .43, SD = .57), B = 1.01, t(78) = 3.92, p < .001, and fused participants in the control condition (M = .58, SD = 1.01), B = .47, t(78) = 2.07, p < .05. The inclusion and control conditions did not differ among fused participants, B = -.27, t(78) = -1.06, p = .29, or among nonfused participants, ps > .90. The regression analysis yielded a main effect of fusion, B = .75, t(78) = 6.11, p < .001. Fused participants endorsed more extreme actions for the group than did nonfused participants (M = .99, SD = 1.21 vs. M = -.38, SD = .55). No other effect was significant, ps > .12.

Donation. The predicted interaction between fusion and the ostracism manipulation emerged, B = -8.61, t(78) = -2.68, p < .01. As shown in the right side of Figure 7, fused participants donated more money in the ostracism condition than in the inclusion condition (M = 82.50, SD = 21.88 vs. M = 47.01, SD = 9.75), B = 24.54, t(78) = 3.56, p < .01, and control condition (M = 47.27, SD = 27.60), B = 13.15, t(78) = 2.21, p < .05. The inclusion and the control conditions did not differ among fused participants, B = -4.37, t(78) = -.65, p = .52, or among nonfused participants, ps > .87. The regression analysis also yielded a main effect of fusion, B = 18.63, t(78) = 5.04, p < .001. Fused participants donated a higher percentage of money than did nonfused participants (M = 58.96, SD = 27.97 vs. M = 27.33, SD = 19.85). No other effect was significant, ps > .25.

Self-esteem. We performed two multiple regressions on the two factors of the Self-Esteem scale (Performance and Social). No significant effects emerged, all ps > .09.

A recurrent surprise and meta-analysis. Although fused participants were especially likely to endorse extreme behavior within the inclusion condition in Experiments 2 and 4, we were surprised that fusion had no significant effect in the inclusion conditions of Experiments 1 and 3. Conceivably,

because inclusion is intrinsically reassuring, it reduces the perception of threat, thereby diminishing the felt need to defend one's country. Whatever the reason for the occasional muted fusion effects in the inclusion conditions may be, the results of a meta-analysis indicate that overall, the fusion effect within the inclusion conditions was robust. That is, when we contrasted fused and nonfused participants within the inclusion conditions of all four experiments, a significant fusion effect emerged, mean r = .32, t(825) = 74.28, p < .001, 95% CI [.3128, .3297].

Discussion

Our findings provide further evidence that the tendency for ostracism to trigger compensatory pro-group behavior among fused persons is a fairly general one. For example, fused people displayed compensatory reactions even when they were ostracized because they were overqualified for inclusion in the group. In addition, the results showed that the interactive effects of ostracism and identity fusion extended to a new response class, helping behavior.

General Discussion

When someone endures the anguish of ostracism, it would seem reasonable to distance themselves from the group that led to, or actually perpetrated, the rejection (Williams, 2009). Yet, in four experiments our fused participants displayed precisely the opposite reaction. That is, whether they were ostracized by an outgroup because of their nationality or by an ingroup because of their personal preferences, they expressed more devotion to the ingroup. Moreover, fused participants responded to ostracism by displaying 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. Also, the compensatory activities of fused participants following ostracism emerged while controlling for group identification. In contrast, nonfused participants displayed no signs of compensatory activity.

In some respects, our evidence that fused participants endorsed extreme pro-group activity following ostracism by an outgroup (Experiments 1 and 2) was not surprising. As noted earlier, rejection by an outgroup may activate feelings of ingroup solidarity, and such feelings could motivate efforts to shore up the standing of the ingroup against adversaries. Indeed, this is the essence of the explanations some have offered for the anti-West activities of the 9-11 bombers (e.g., Atran, 2010; Sageman, 2004). Such explanations are also buttressed by recent evidence that ostracism by an outgroup fosters hostility against that outgroup (Schaafsma & Williams, 2010).

More striking, however, was the case that irrevocable ostracism by the *in*group amplified the pro-group activity of fused participants (Experiments 3 and 4). That is, whereas

nonfused persons reacted to irrevocable ostracism by taking no additional measures to restore their standing with the group, fused people endorsed compensatory activity just as enthusiastically as they did when they were rejected by the outgroup. Moreover, it was not simply that fused participants were undaunted by the ostracism manipulation. Instead, they were galvanized by it, increasing their endorsement of extreme actions on behalf of the group and strengthening their resolve to remain in the group. This finding presumably reflects two qualities of fused people. First, they are so deeply immersed in the group that, for them, being excluded from the group is no more tenable than being excluded from themselves. Second, they possess a strong sense of personal agency that is organized around their group membership (Swann, Gómez, Huici, et al., 2010). Their readiness to give their all for the group, in combination with the fact that they could not conceive of actually being excluded from the group, presumably motivated endorsement of extreme actions for the group. Moreover, our findings show that such compensatory activity in the face of rejection is not limited to individuals who have recently joined the group, as in recent investigations (Matschke & Sassenberg, 2010).

Yet the fact that fused persons endorsed compensatory activity for their country even when they were *irrevocably* ostracized from a chat group composed of their compatriots should not be taken as evidence that they displayed an irrational commitment to their group. That is, despite their rejection by members of the chat group, we suspect that participants clung to the conviction that their actions would be viewed favorably by the larger Spanish collective. From this perspective, the compensatory activities of fused participants were designed to symbolically reaffirm the sense of connection to the ingroup that was threatened by the ostracism. This reasoning can also explain why in the first two experiments, rejection of the ingroup by an outgroup triggered compensatory reactions among fused participants. That is, when the group with which they were fused was rejected, it challenged the group's viability, and compensatory activity simultaneously reaffirmed its viability as well as their alignment with it.

Our findings make several key contributions to the ostracism literature. For example, our results buttress earlier evidence (Bernstein, Sacco, Young, Hugenberg, & Cook, 2010; Gonsalkorale & Williams, 2007; A. Smith & Williams, 2004; Zadro, Williams, & Richardson 2004) that the source of the social exclusion has little impact on responses to ostracism. In addition, we extend the effects of ostracism to new outcome measures, namely, endorsement of extreme pro-group behavior, desire for social mobility, and monetary donations to the group. Furthermore, we introduced a manipulation of ostracism that can be implemented online.

Nevertheless, our most important contribution is surely that we have helped illuminate the mechanisms underlying the effects of ostracism by identifying a new moderator of ostracism effects. That is, past researchers have noted that people may either compensate or give up in the wake of ostracism but have largely refrained from specifying the variables that moderate such reactions (for a review of exceptions, see Williams, 2007). Our evidence that identity fusion moderated the effects of ostracism, while group identification did not, highlights the crucial role of both the personal and social self in responses to ostracism. Furthermore, evidence of the moderating effects of fusion may also suggest strategies for increasing the fidelity of future investigations of ostracism. For example, researchers might follow up evidence that ostracism fosters negative mood and diminishes self-esteem (Gonsalkorale & Williams, 2007; A. Smith & Williams, 2004; Zadro, et al., 2004) by determining whether fused persons are primarily, or even uniquely, responsible for this pattern.

Our findings may also clarify the motives that give rise to compensatory reactions to ostracism. Past analyses have suggested that ostracism is vexing because it frustrates four distinct needs: belongingness, control, meaningful existence/ recognition, and self-enhancement (e.g., Williams, 2007). The results of Experiment 4, however, indicate that ostracism triggered compensatory activity among fused individuals even when rejection was based on being "too good" for the group. This finding, together with evidence that compensatory activity did not raise self-esteem, suggests that the responses of our fused participants did not represent efforts to restore feelings of self-worth following an ego threat. In conjunction with evidence that the self-enhancement motive is less pervasive than is often assumed (Kwang & Swann, 2010), these data suggest that the motive for self-enhancement may not play as prominent a role in reactions to ostracism as other variables, such as belongingness, control, and meaningful existence/recognition.

Conclusions

The robustness of our effects could be taken as to support the idea that reactions to ostracism reflect a largely universal response that does not require extensive cognitive analyses (Goodwin, Williams, & Carter-Sowell, 2010; Levine & Kerr, 2007; Wirth & Williams, 2009). That is, ostracism elicited compensatory activity among fused persons regardless of the source (outgroup or ingroup), the outcome measure (extreme actions, resolve to remain in the group, or donations), or rationale alleged to underlie rejection (nationality, choice of discussion topics, or being overqualified). The notion that reactions to ostracism are largely universal could, in turn, be used to buttress claims that the desire for belongingness that is thought to be frustrated by social ostracism is a very basic human motive that is deeply rooted in the human psyche (Baumeister & Leary, 1995). Fair enough. Nevertheless, our evidence that reactions to ostracism are moderated by identity fusion indicates that although reactions to ostracism may be pervasive, they are neither invariant nor inevitable. Instead, like most important social psychological phenomena, responses to ostracism are moderated by the internalized experiences of its victims. For this reason, future researchers might seek to elaborate more precisely how internalized social experiences determine whether people respond to ostracism with passive acceptance or bold, pro-group action.

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Note

1. We chose this measure of identification because previous research (Swann, Gómez, Seyle, Morales, & Huici, 2009) has shown that the fusion scale is more strongly related to Mael and Ashforth's (1992) scale than other identification scales, such as Jetten, Branscombe, Schmitt, and Spears (2001), r(112) = .26, and Tropp and Wright (2001), r(248) = .23. We accordingly used it in all experiments.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Aron, A., Aron, E. N., & 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.
- Aron, A., Aron, E. N., Tudor, M., & Nelson, G. (1991). Close relationships as including other in the self. *Journal of Personality and Social Psychology, 60*, 241-253.
- Atran, S. (2010). *Talking to the enemy: Violent extremism, sacred values, and what it means to be human*. New York, NY: HarperCollins.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*, 497-529.
- Bernstein, M. J., Sacco, D. F., Young, S. G., Hugenberg, K., & Cook, E. (2010). Being "in" with the in-crowd: The effects of social exclusion and inclusion are enhanced by the perceived essentialism of ingroups and outgroups. *Personality and Social Psychology Bulletin*, 36, 999-1009.
- Billig, M., & Tajfel, H. (1973). Social categorization and similarity in intergroup behavior. *European Journal of Social Psychology*, *3*, 27-52.

- Bourgeois, K. S., & Leary, M. R. (2001). Coping with rejection: Derogating those who choose us last. *Motivation and Emotion*, 25, 101-111.
- Branscombe, N. R., Ellemers, N., Spears, R., & Doosje, B. (1999). The context and content of social identity threats. In N. Ellemers, R. Spears, & B. Doosje (Eds.), *Social identity: Context, commitment, and content* (pp. 35-58). Oxford, UK: Blackwell.
- Breakwell, G. M. (1979). Illegitimate group membership and intergroup differentiation. *British Journal of Social and Clinical Psychology*, 18, 141-149.
- Brewer, M. B., & Gardner, W. L. (1996). Who is this "we"? Levels of collective identity and self representations. *Journal of Personality and Social Psychology*, 71, 83-93.
- Brooks, M. L., Swann, W. B., Jr., & Mehta, P. H. (2011). Reasserting the self: Blocking self-verifying behavior triggers compensatory self-verification. *Self & Identity*, *10*, 77-84.
- Coats, S., Smith, E. R., Claypool, H. M., & Banner, M. J. (2000). Overlapping mental representations of self and in-group: Reaction time evidence and its relationship with explicit measures of group identification. *Journal of Experimental Social Psychology*, 36, 304-315.
- Dotan-Eliaz, O., Sommer, K. L., & Rubin, Y. S. (2009). Multilingual groups: Effects of linguistic ostracism on felt rejection and anger, coworker attraction, perceived team potency, and creative performance. *Basic & Applied Social Psychology*, 31, 363-375.
- Eisenberger N. I., Lieberman M. D., & Williams K. D. (2003). Does rejection hurt? An fMRI study of social exclusion. *Science*, *302*, 290-292.
- Ellemers, N., Spears, R., & Doosje, B. (2002). Self and social identity. In S. T. Fiske, D. L Schacter, & C. Zahn-Waxler (Eds.), Annual review of psychology (Vol. 53, pp. 161-186). Palo Alto, CA: Annual Reviews.
- Gómez, Á., Brooks, M. L., Buhrmester, M. D., Vázquez, A., Jetten, J., & Swann, W. B., Jr. (2011). On the nature of identity fusion: Insights into the construct and a new measure. *Journal of Personality and Social Psychology*, 100, 918-933.
- Goodwin, S. A., Williams, K. D., & Carter-Sowell, A. R. (2010). The psychological sting of stigma: The costs of attributing ostracism to racism. *Journal of Experimental Social Psychol*ogy, 46, 612-618.
- Gonsalkorale, K., & Williams, K. D. (2007). The KKK won't let me play: Ostracism even by a despised outgroup hurts. *European Journal of Social Psychology*, *37*, 1176-1186.
- Heatherton, T. F., & Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. *Journal of Personal*ity and Social Psychology, 60, 895-910.
- Jamieson, J. P, Harkins, S. G., & Williams. K. D. (2010). Need threat can motivate performance after ostracism. *Personality* and Social Psychology Bulletin, 36, 690-702.
- Jetten, J., Branscombe, N. R., Schmitt, M. T., & Spears, R. (2001).
 Rebels with a cause: Group identification as a response to perceived discrimination from the mainstream. *Personality and Social Psychology Bulletin*, 27, 1204-1213.

- Jetten, J., Branscombe, N. R., Spears, R., & McKimmie, B. M. (2003). Predicting the paths of peripherals: The interaction of identification and future possibilities. *Personality and Social Psychology Bulletin*, 29, 130-140.
- Kwang, T., & Swann, W. B., Jr. (2010). Do people embrace praise even when they feel unworthy? A review of critical tests of selfenhancement versus self-verification. *Personality and Social Psychology Review, 14*, 263-280.
- Leary, M., Kowalski, R. M., Smith, L., & Phillips, S. (2003). Teasing, rejection, and violence: Case studies of the school shootings. *Aggressive Behavior*, 29, 202-214.
- Leary, M. R., Springer, C., Negel, L., Ansell, E., & Evans, K. (1998). The causes, phenomenology, and consequences of hurt feelings. *Journal of Personality and Social Psychology*, 74, 1225-1237.
- Levine, J. M., & Kerr, N. L. (2007). Inclusion and exclusion: Implications for group processes. In A. W. Kruglanski & E. T. Higgins (Eds.), *Handbook of basic principles in social psychology* (2nd ed., pp. 759-784). New York, NY: Guilford.
- Lewin, K. (1948). Resolving social conflicts. New York: Harper.
- Mackie, D. M., Devos, T., & Smith, E. R. (2000). Intergroup emotions: Explaining offensive action tendencies in an intergroup context. *Journal of Personality and Social Psychology*, 79, 602-616.
- Mackie, D. M., Smith, E. R., & Ray, D. G. (2008). Intergroup emotions and intergroup relations. *Personality and Social Psychology Compass*, 2, 1866-1880.
- 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.
- Maner, J. K., DeWall, C. N., Baumeister, R. F., & Schaller, M. (2007). Does social exclusion motivate interpersonal reconnection? Resolving the "porcupine problem." *Journal of Personality and Social Psychology*, 92, 42-55.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224-253.
- Matschke, C., & Sassenberg, K. (2010). The role of internal motivation and avoidance strategies. *European Journal of Social Psychology*, 40, 891-900.
- Nezlek, J. B., Kowalski, R. M., Leary, M. R., Blevins, T., & Holgate, S. (1997). Personality moderators of reactions to interpersonal rejection: Depression and trait self-esteem. *Personality and Social Psychology Bulletin*, 23, 1235-1244.
- Noel, J. G., Wann, D. L., & Branscombe, N. R. (1995). Peripheral ingroup membership status and public negativity toward outgroups. *Journal of Personality and Social Psychology*, 68, 127-137.
- Pepitone, A., & Wilpizeski, C. (1960). Some consequences of experimental rejection. *Journal of Abnormal and Social Psychology*, 60, 359-364.
- Prentice, D. A., Miller, D. T., & Lightdale, J. R. (1994). Asymmetries in attachments to groups and to their members: Distinguishing between common-interest and common-bond groups. *Person-ality and Social Psychology Bulletin*, 20, 484-493.

- Sageman, M. (2004). Understanding terror networks. Philadelphia: University of Pennsylvania Press.
- Schaafsma, J., & Williams, K. D. (2010). Exclusion, intergroup hostility, and religious fundamentalism. Unpublished manuscript, Purdue University.
- Schubert, T. W., & Otten, S. (2002). Overlap of self- ingroup, and outgroup: Pictorial measures of self-categorization. *Self and Identity*, 1, 353-376.
- Smith, A., & Williams, K. D. (2004). R U there? Ostracism by cell phone text messages. *Group Dynamics*, 8, 291-301.
- Smith, E. R., & Henry, S. (1996). An in-group becomes part of the self: response evidence. *Personality and Social Psychology Bulletin*, 25, 635-642.
- Smith, E. R., Seger, C. R., & Mackie, D. M. (2007) Can emotions be truly group level? Evidence for four conceptual criteria. *Journal of Personality and Social Psychology*, 93, 431-446.
- 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). Mahwah, NJ: Erlbaum.
- Swann, W. B., Jr. (2011). Self-verification theory. In P. Van Lang, A. Kruglanski, & E.T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 23-42). London, UK: Sage.
- Swann, W. B., Jr., Gómez, Á., Dovidio, J. F., Jetten, J., & Hart, S. (2010). Dying and killing for one's group: Identity fusion moderates responses to intergroup versions of the trolley problem. *Psychological Science*, 21, 1176-1183.
- Swann, W. B., Jr., Gómez, Á., Huici, C., Morales, J. F., & Hixon, J. G. (2010). Identity fusion and self-sacrifice: Arousal as catalyst of extreme and altruistic group behaviour. *Journal of Personality and Social Psychology*, 5, 824-841.
- Swann, W. B., Jr., Gómez, A., 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*, 5, 995-1011.
- Swann, W. B., Jr., & Hill, C. A. (1982). When our identities are mistaken: Reaffirming self-conceptions through social interaction. *Journal of Personality and Social Psychology, 43*, 59-66.
- Swann, W. B., Jr., & Read, S. J. (1981). Self-verification: How we sustain our self-conceptions. *Journal of Experimental Social Psychology*, 17, 351-372.
- Tajfel, H. (Ed.). (1978). Differentiation between social groups: Studies in the social psychology of intergroup relations. London, UK: Academic Press.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Monterey, CA: Brooks-Cole.

- Tropp, L. R., & Wright, S. C. (2001). Ingroup identification as inclusion of ingroup in the self. *Personality and Social Psychology Bulletin*, 27, 585-600.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group*. Oxford, UK: Basil Blackwell.
- Turner, J. C., Oakes, P. J., Haslam, S. A., & McGarty, C. (1994).Self and collective: Cognition and social context. *Personality and Social Psychology Bulletin*, 20, 454-463.
- Turner, J. C., Sachdev, I., & Hogg, M. A. (1983). Social categorization, interpersonal attraction, and group formation. *British Journal of Social Psychology*, 22, 227-239.
- Warburton, W. A., Williams, K. D., & Cairns, D. R. (2006). When ostracism leads to aggression: The moderating effects of control deprivation. *Journal of Experimental Social Psychology*, 42, 213-220.
- Williams, K. D. (1997). Social ostracism: The causes and consequences of "the silent treatment." In R. Kowalski (Ed.), Aversive interpersonal behaviors (pp. 133-170). New York, NY: Plenum.
- Williams, K. D. (2007). Ostracism. Annual Review of Psychology, 58, 425-452.
- Williams, K. D. (2009). Ostracism: A temporal need-threat model. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 41, pp. 279-314). New York, NY: Academic Press.
- Williams, K. D., Cheung, C. K. T., & Choi, W. (2000). CyberOstracism: Effects of being ignored over the Internet. *Journal of Personality and Social Psychology*, 79, 748-762.
- Williams, K. D., & Sommer, K. L. (1997). Social ostracism by coworkers: Does rejection lead to loafing or compensation? Personality and Social Psychology Bulletin, 23, 693-706.
- Williams, K. D., & Zadro, L. (2005). Ostracism: An indiscriminate early detection system. In K. D. Williams, J. P. Forgas, & W. von Hippel (Eds.), *The social outcast: Ostracism, social exclusion,* rejection, and bullying (pp. 19-34). New York, NY: Psychology Press.
- Wirth, J., & Williams, K. D. (2009). "They don't like our kind": Consequences of being ostracized while possessing a group membership. Group Processes and Intergroup Relations, 12, 111-127.
- Young, S. G., Bernstein, M. J., & Claypool, H. M. (2009). Rejected by the nation: The electoral defeat of candidates included in the self is experienced as personal rejection. *Analyses of Social Issues & Public Policy*, *9*, 315-326.
- Zadro, L., Williams, K. D., & Richardson, R. (2004). How low can you go? Ostracism by a computer is sufficient to lower selfreported levels of belonging, control, self-esteem, and meaningful existence. *Journal of Experimental Social Psychology*, 40, 560-567.