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## Identity fusion leads to willingness to fight and die for the group: The moderating impact of being informed of the reasons behind other members' sacrifice

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### ABSTRACT

Identity fusion is capable of predicting pro-group behaviors. We examine how strongly fused individuals react when they learn the motivations driving other strongly fused individuals' pro-group behaviors. Three studies were conducted in two countries (Spain and USA). Results showed an attenuation effect in their willingness to fight and die for in-group members when strongly fused individuals learned that other participants displaying their same level of visceral commitment to the group would self-sacrifice for morally relevant reasons, compared to pragmatic reasons. The final study suggests that the attenuation in willingness to fight and die observed in those strongly fused can be interpreted as a sign of confidence to delay their self-sacrifice rather than a need to be unique.

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Identity fusion; sacrifice;  
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Identity fusion is a visceral feeling of oneness with a group, wherein the personal self (characteristics of individuals that make them unique) joins with the social self (characteristics of individuals that align them with a group), and the borders between the two become porous (Gómez & Vázquez, 2015; Swann, Jetten, Gómez, Whitehouse, & Bastian, 2012). Identity fusion predicts pro-group behaviors such as endorsement of fighting and dying for the group (Gómez et al., 2011), willingness to self-sacrifice for in-group members in the trolley dilemma (Swann et al., 2014), readiness to deny group wrong-doing (Besta, Gómez, & Vázquez, 2014), and donating personal funds to in-group members (Gómez, Morales, Hart, Vázquez, & Swann, 2011).

Research has identified several factors that amplify the consequences of identity fusion and the mechanisms that explain such consequences. In particular, identity fusion predicts the endorsement of pro-group behavior by activating personal or social identity (Gómez, Brooks et al., 2011; Swann, Gómez, Seyle, Morales, & Huici, 2009), increasing arousal (Swann, Gómez, Huici, Morales, & Hixon, 2010), and priming shared biological characteristics or core values (Swann, Buhrmester et al., 2014). Moreover, the relationship between strong levels of fusion and an individual's willingness to fight and die for the group has been linked to

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feelings of agency (Gómez, Brooks et al., 2011; Swann et al., 2010), perceptions of invulnerability (Gómez, Brooks et al., 2011), familial ties (Swann, Buhrmester et al., 2014), and emotional engagement (Swann, Gómez et al., 2014).

Despite the growing body of research on identity fusion, only one study has examined individuals' reasoning when deciding to self-sacrifice for in-group members according to their degree of fusion with the group. Results indicated that, in a simulated trolley dilemma (Swann, Gómez et al., 2014), strongly fused participants were more likely to self-sacrifice, and moreover justified their decision using moral reasoning (e.g., "It is the right thing to do"). In contrast, participants scoring low in fusion, who also decided to self-sacrifice for in-group members, justified their decision for pragmatic reasons (e.g., "They are more than me, it makes sense that one dies to save many, even if that one is me") (see also Gawronski, Armstrong, Conway, Friesdorf, & Hütter, 2017).

Given that *self-generated reasons* can vary as a function of identity fusion, the goal of the present research was to examine the extent to which *reasons generated by others* can also play a role in understanding willingness to fight and die.

In thinking about how knowledge of others' reasons to fight and die for the in-group might influence one's own willingness to fight and die, several possibilities emerge: First, being informed about other's morally relevant reasons could either bolster or attenuate the desire of fused individuals to self-sacrifice. A second possibility is that other's reasons may actually have relatively little impact on self-sacrificial behaviors. Indeed, once fused individuals have already decided to self-sacrifice for the group, they may care very little about the reasons behind others' extreme behaviors.

The current experiments were designed to explore these different possibilities. Specifically, our primary goal was to examine whether the perceived reasons behind others' willingness to self-sacrifice for the group matters for one's own willingness to fight and die. Importantly, others' willingness to engage in self-sacrificial behavior was kept constant and convergent with that of strongly fused individuals (e.g., high willingness to self-sacrifice). Only others' reasons behind their behavior were manipulated across conditions. Assuming that others' reasons play a role, our second goal was to examine *which* reasons (morally relevant or pragmatic) are more likely to affect one's willingness to fight and die, and the extent of their impact. Our final goal was to explore the psychological mechanisms that may be responsible for any potential outcome obtained throughout the studies.

## Study 1

Study 1 tested the effects of being informed that other strongly fused individuals are willing to self-sacrifice for in-group members. We examined whether providing information that other people's self-sacrifice was motivated by morally relevant reasons moderates the relationship between identity fusion and willingness to fight and die for the group compared to a control condition in which no rationale for the relationship between group bond and self-sacrifice was provided.

## Method

### Participants and design

Seventy-five North-Americans (72% women, mean age = 24.91, SD = 10.72) received a small fee for participating in an online Qualtrics survey through MTurk. This relatively small sample size was all that could be collected, but the data were analyzed nonetheless since the main purpose of the study was to see if a clear direction of the effect emerged. Participants were assigned to one of two experimental conditions (Self-Sacrifice rationale: Morally Relevant vs. Control), with scores on Identity Fusion as a continuous predictor and willingness to fight and die as the dependent variable.

### Procedure and materials

First, participants responded to the 7-item (e.g., “I am one with the United States”, “I make the United States strong”) *verbal fusion* scale (Gómez, Brooks et al., 2011), on which responses ranged from 1 (completely disagree) to 7 (completely agree), with higher numbers reflecting more fusion. Reliability was  $\alpha = .92$ . Next, all participants were provided with a summary of the results of an ostensibly different scientific study explaining that in-group members who hold a strong visceral feeling of oneness with the group are more willing to self-sacrifice to save other in-group members in fictitious situations. The summary reported that American participants were given a version of the trolley dilemma in which it was necessary to decide whether they would (a) let a runaway trolley crush and kill five members of their country or (b) jump off a bridge in front of the trolley to save the five in-group members at the expense of their own lives (adapted from Swann et al., 2010). The text went on to say that the study showed that a representative sample of Americans who have a visceral feeling of oneness with the group showed significantly greater intentions of jumping in front of the trolley and dying to stop it from killing five in-group members.

Participants were then randomly assigned to the *morally relevant reasons to self-sacrifice condition* or to the *control condition*. Participants in the *morally relevant reasons to self-sacrifice condition* learned that the individuals who decided to self-sacrifice for the five in-group members were motivated by morally relevant reasons. Specifically, when confronted with the dilemma, these individuals reported experiencing tension, distress, and anxiety regarding the difficult situation of the in-group members, and instantly believed that the morally correct course of action was to sacrifice oneself. Many of these individuals also noted an immediate impulsive reaction to sacrifice their life to save the lives of their fellow in-group members. The summary also included an example of an individual’s line of thinking as follows: “It would be horrible if they should die and I did nothing knowing that sacrificing myself is the right thing to do” (adapted from Swann, Gómez et al., 2014, p. 719). Participants in the *control condition* received only the summary information but did not receive any feedback about the reasons motivating the self-sacrifice. Finally, all participants completed the willingness to fight and die scale (e.g., “I would fight someone physically threatening another member of my country”, “I would sacrifice my life if it saved another group member’s life”), taken from Swann et al. (2009). Responses were recorded on a 1 (completely disagree) to 7 (completely agree), scale, with  $\alpha = .88$ .

We report all measures, manipulations, and exclusions in these three studies. Furthermore, we report all studies conducted in this line of research.

## Results

### Willingness to fight and die for the group

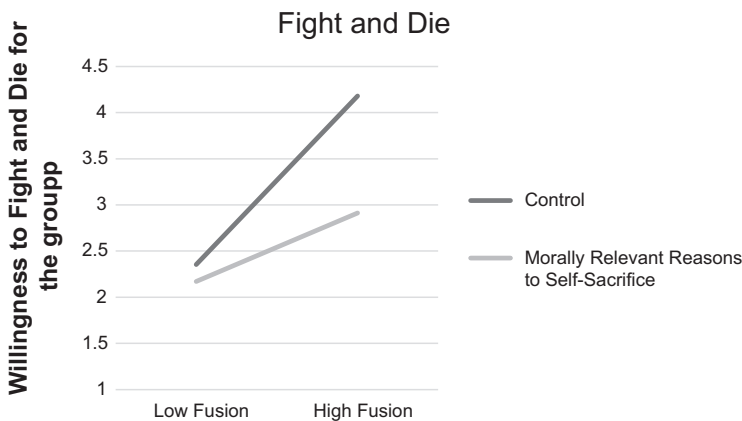
Linear regression analyses were conducted to examine the effects of identity fusion (centered), self-sacrifice rationale (effect coded:  $-1$  control,  $1$  morally relevant reasons to self-sacrifice), and the interaction of the two variables on willingness to fight and die for the group. The data revealed a significant main effect of fusion,  $B = .55$ ,  $t(71) = 6.52$ ,  $p < .001$ , 95% CI:  $.3831, .7201$ , indicating a greater willingness to fight and die for strongly fused relative to weakly fused participants. Also, a significant main effect of self-sacrifice rationale,  $B = -.72$ ,  $t(71) = -3.26$ ,  $p = .002$ , 95% CI:  $-1.1692, -.2828$ , indicated that participants in the morally relevant reasons to self-sacrifice condition expressed *less* willingness to fight and die for the group than participants in the control condition.

More critical to our primary concerns, a significant two-way interaction also emerged,  $B = -.41$ ,  $t(71) = -2.21$ ,  $p = .030$ , 95% CI:  $-.7916, -.0413$ . As can be seen in Figure 1, the effect of identity fusion on willingness to fight and die for the group in the morally relevant reasons to self-sacrifice condition was lower than in the control condition,  $B = .28$ ,  $t(71) = 1.75$ ,  $p = .083$ , 95% CI:  $-.0381, .6083$ , vs.  $B = .70$ ,  $t(71) = 7.34$ ,  $p < .001$ , 95% CI:  $.5112, .8920$ , respectively.

Put differently, among those participants who scored relatively high in identity fusion ( $+1SD$ ), those who were assigned to the control condition reported greater willingness to fight and die for their group than those who were assigned to the morally relevant reasons condition,  $B = -1.26$ ,  $t(71) = -3.69$ ,  $p < .001$ , 95% CI:  $-1.9529, -.5830$ . In contrast, for those who scored relatively low in identity fusion ( $-1SD$ ) no difference in willingness to fight and die emerged between the control and morally relevant reasons condition,  $B = -.18$ ,  $t(71) = -.58$ ,  $p = .563$ , 95% CI:  $-.5638, .4487$ .

## Discussion

Study 1 indicated that among strongly fused participants, those receiving morally relevant reasons to sacrifice their lives for members of their in-group were significantly less willing



**Figure 1.** Willingness to fight and die for the group as a function of identity fusion and other's reasons to self-sacrifice for in-group members (Study 1).

to fight and die for the group than participants who did not receive any justification. In contrast, no difference in willingness to fight and die for the group was found among weakly fused participants as a function of self-sacrifice rationale.

When interpreting these results, it is important to note that among strongly fused individuals, the attenuation in willingness to fight and die for the group in the morally relevant reasons condition could have emerged as a consequence of being informed of the reasoning behind other's behavior. In other words, it is possible that merely the act of providing "reasons" that justify other peoples self-sacrifice, regardless of how morally relevant or irrelevant those reasons might be, could produce an effect. Second, one might argue that this effect could also be driven by cultural characteristics. Therefore, what has been labelled as "morally relevant" for this sample could have a very different meaning for participants from a different country. To test these possibilities, Study 2 was conducted with a different population and included an experimental condition with a different justification to self-sacrifice for in-group members.

## Study 2

Study 2 tested whether knowing the reasons that other strongly fused in-group members are willing to self-sacrifice for their peers would impact one's own willingness to fight and die for the group. Of course, it is possible to provide a variety of different kinds of reasons for one's actions beyond those based on moral principles. For example, previous research has shown that one might engage in self-sacrificial behavior based largely on pragmatic reasons (Swann et al., 2014). Interestingly, learning of other in-group members willingness to self-sacrifice for pragmatic reasons may either enhance or attenuate strongly fused individuals' willingness to self-sacrifice for their peers based on factors such as the number of peers their actions might protect from harm. Thus, an important goal of study 2 was to compare the extent to which reasons based on two fundamentally different types of thinking (moral vs. pragmatic reasons) might influence strongly fused in-group members willingness to self-sacrifice for their peers. Similar to study 1, a control group was included as our baseline of comparison in which no reasons to self-sacrifice were provided.

## Method

### Participants and design

One hundred and twenty-eight Spanish undergraduate students from UNED (74.2% women, mean age = 38.20, SD = 12.14) participated online for course credit. Sample size was determined based on the number of participants collected during the week in which the study was posted. Likewise, our goal was to obtain a minimum of 20 participants per condition, which was achieved. Participants were assigned to one of three experimental conditions (Self-Sacrifice rationale: Morally Relevant vs. Pragmatic vs. Control), with scores on Identity Fusion as a continuous predictor, and willingness to fight and die as the dependent variable.

### Procedure and materials

First, participants responded to the 7-item (e.g., "I am one with Spain," "I make Spain strong") *verbal fusion* scale (Gómez, Brooks et al., 2011), on which responses ranged from 1

(completely disagree) to 7 (completely agree), with higher numbers reflecting more fusion. Reliability was  $\alpha = .89$ . Next, all participants were provided with the same summary as in Study 1; however, in this case the text described a representative sample of Spanish citizens instead of American citizens. Participants were then randomly assigned either to the *control*, to the *morally relevant reasons to self-sacrifice condition*, or to the *pragmatic reasons to self-sacrifice condition*. Participants in the *control* and the *morally relevant reasons to self-sacrifice conditions* received the same experimental manipulation as participants in Study 1, but adapted for a Spanish audience. Participants in the *pragmatic reasons to self-sacrifice condition* learned that the willingness to self-sacrifice shown by in-group members was motivated by pragmatic reasons. Specifically, when confronted with the dilemma, these individuals' reasoning did not reference any kind of attachment to their fellow group members. Instead, their reasoning focused on minimizing the number of lives lost. The summary also included an example of an individual's line of thinking as follows: "It is better to save five lives than only one, even when the one life is mine." (adapted from Swann, Gómez et al., 2014, p. 719). Finally, all participants completed the willingness to fight and die scale (Swann et al., 2009), on which responses ranged from 1 (completely disagree) to 7 (completely agree), with higher numbers reflecting a greater willingness to fight and die. Reliability was  $\alpha = .84$ .

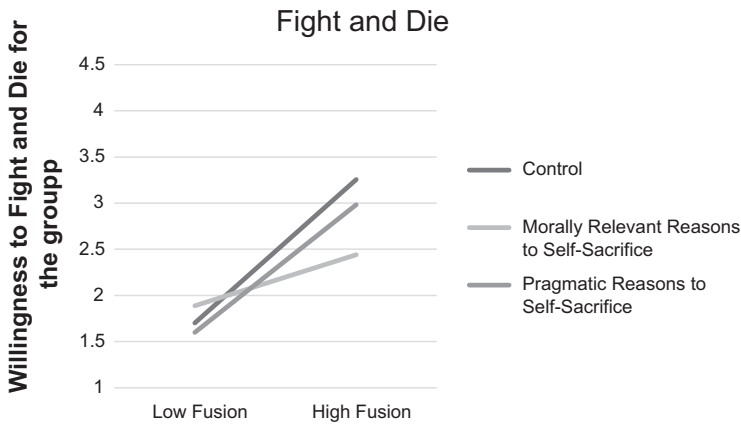
## Results

### *Willingness to fight and die for the group*

We conducted a linear regression analysis using the PROCESS 2.16 macro Model 1 for SPSS with identity fusion (centered), self-sacrifice rationale as a multicategorical predictor (moral reasons vs. pragmatic reasons vs control), and the interaction of the two variables on participants' willingness to fight and die. We contrast coded the reasons to self-sacrifice as follows:  $-1 =$  Pragmatic condition,  $0 =$  Control condition,  $1 =$  Morally relevant reasons condition. In order to properly probe an interaction that has one multi-categorical predictor, we followed the tutorial by Hayes and Montoya (2017). This required transforming the independent variable into two different dichotomous variables ( $D_1, D_2$ ). To be able to make all possible comparisons between conditions (Control vs. Morally relevant reasons to self-sacrifice, Control vs. Pragmatic reasons to self-sacrifice, and Morally vs. Pragmatic reasons to self-sacrifice), the analysis was run twice with different coding for  $D_1$  &  $D_2$ , namely, dummy ( $D_1 = 0, 1, 0, D_2 = 0, 0, 1$ ) and sequential ( $D_1 = 0, 1, 1, D_2 = 0, 0, 1$ ).

The regression revealed a significant main effect of identity fusion on willingness to fight and die for the group,  $B = .65, t(122) = 6.10, p < .001, 95\% \text{ CI}: .3633, .7120$ , indicating that strongly fused participants were more willing to fight and die for the group. A significant two-way interaction between identity fusion and reasons to self-sacrifice also emerged,  $\Delta R^2 = .047, F(2, 122) = 4.846, p = .009$ , meaning that the relationship between identity fusion and willingness to fight and die for the group varied as a function of the different self-sacrifice rationales.

Comparing the control condition and the morally relevant reasons condition, a significant two-way interaction emerged,  $B = -.38, t(122) = -2.79, p = .006, 95\% \text{ CI}: -.6638, -.1137$ , replicating findings from Study 1. As can be seen in Figure 2, the effect of identity fusion on willingness to fight and die for the group in the morally relevant reasons condition was lower than in the control condition,  $B = .21, t(122) = 2.34, p = .020, 95\% \text{ CI}: .0339, .3971$ , vs.  $B = .60, t(122) = 5.78, p < .001, 95\% \text{ CI}: .3976, .8108$ , respectively.



**Figure 2.** Willingness to fight and die for the group as a function of identity fusion and other's reasons to self-sacrifice for in-group members (Study 2).

A similar two-way interaction emerged when comparing the pragmatic reasons condition and the morally relevant reasons condition,  $B = -.32$ ,  $t(122) = -2.53$ ,  $p = .012$ , 95% CI:  $-.5739$ ,  $-.0705$ . As can be seen in Figure 2, the effect of identity fusion on willingness to fight and die for the group in the morally relevant reasons condition was lower than in the pragmatic reasons condition,  $B = .21$ ,  $t(122) = 2.34$ ,  $p = .020$ , 95% CI:  $.0339$ ,  $.3971$ , vs.  $B = .53$ ,  $t(122) = 6.10$ ,  $p < .001$ , 95% CI:  $.3633$ ,  $.7120$ , respectively.

When comparing the control condition with the pragmatic reasons condition, no significant two-way interaction emerged,  $B = .06$ ,  $t(122) = .48$ ,  $p = .626$ , 95% CI:  $-.2037$ ,  $.3369$ , meaning that the effect of identity fusion on willingness to fight and die for the group in the control condition was not significantly different than the one in the pragmatic reasons condition,  $B = .60$ ,  $t(122) = 5.78$ ,  $p < .001$ , 95% CI:  $.3976$ ,  $.8108$ , vs.  $B = .53$ ,  $t(122) = 6.10$ ,  $p < .001$ , 95% CI:  $.3633$ ,  $.7120$ , respectively.

Put differently, as Figure 2 shows, among participants scoring relatively low in identity fusion ( $-1SD$ ), no difference in willingness to fight and die for the group emerged between the control condition and the morally relevant reasons condition,  $B = .18$ ,  $t(122) = .75$ ,  $p = .454$ , 95% CI:  $-.3044$ ,  $.6755$ , the control condition and the pragmatic condition,  $B = .10$ ,  $t(122) = .39$ ,  $p = .693$ , 95% CI:  $-.4049$ ,  $.6072$ , or the pragmatic condition and the morally relevant reasons condition,  $B = .28$ ,  $t(122) = 1.25$ ,  $p = .212$ , 95% CI:  $-.1665$ ,  $.7399$ . However, among participants scoring relatively high in identity fusion ( $+1SD$ ), the data revealed a significantly greater willingness to fight and die for the group for those participants in the control condition relative to morally relevant reasons condition,  $B = -.81$ ,  $t(122) = -3.21$ ,  $p = .001$ , 95% CI:  $-1.3160$ ,  $-.3127$ , yet no difference between the control and the pragmatic condition,  $B = .27$ ,  $t(122) = 1.12$ ,  $p = .261$ , 95% CI:  $-.2058$ ,  $.7506$ . Finally, participants in the pragmatic condition were significantly more willing to fight and die than participants in the morally relevant reasons condition,  $B = -.54$ ,  $t(122) = -2.32$ ,  $p = .021$ , 95% CI:  $-1.0036$ ,  $-.0803$ .

## Discussion

Study 2 replicated the pattern of effects that emerged in Study 1. Specifically, among strongly fused participants, those receiving morally relevant reasons reported significantly less



willingness to fight and die for the group compared to those who received no justification. Once again, among weakly fused participants, those assigned to receive morally relevant reasons did not differ from those who received no justification (control condition). Importantly, Study 2 also extended this finding to participants from a different country: Spain.

When we examined the impact of receiving pragmatic reasons on the willingness of participants to fight and die for the group, no difference emerged between those who did not receive any justification (control) and those who received pragmatic reasons and this was true for both strongly and weakly fused participants. However, among strongly fused participants, a significantly greater willingness to fight and die for the group was reported by those who received pragmatic reasons compared with those who received morally relevant reasons. Among weakly fused participants, those assigned to receive pragmatic reasons did not differ from those who received morally relevant reasons.

Having replicated the basic pattern of effects that emerged in Study 1, we turned our attention to the potential mechanisms that might explain why strongly fused individuals were less inclined to endorse pro-group behaviors after being informed that others were willing to self-sacrifice for morally relevant reasons. We examined two such mechanisms in Study 3.

### Study 3

The primary goal of the final study was to explore two reasons why receiving morally relevant reasons might attenuate willingness to fight and die for the group among strongly fused individuals. That is, learning about the moral reasons for the self-sacrifice of others might reduce one's own intention to self-sacrifice for either of two reasons. First, learning about others reasons for self-sacrifice may rob them of the belief that self-sacrifice will make them feel unique. Second, learning this information may bolster their confidence that can sacrifice themselves at a later time.

Study 3 also included an ancillary measure designed to test the extent to which participants perceived to have completely understood the reasons to self-sacrifice manipulation.

### Method

#### *Participants and design*

One hundred and fifty-five Spanish undergraduate students from UNED (74.9% women, mean age = 35.21, SD = 11.16) participated online for course credit. The procedure was identical to Study 1. Sample size was determined using the same method as in the prior studies. Similar to Studies 1 and 2, our goal was to obtain a minimum of 20 participants per condition, which was achieved. Participants were assigned to one of two experimental conditions (Self-Sacrifice rationale: Morally Relevant vs. Control), with scores on Identity Fusion as a continuous predictor and willingness to fight and die as the dependent variable.

#### *Procedure and materials*

First, participants responded to the 7-item *verbal fusion* scale (Gómez, Brooks et al., 2011),  $\alpha = .86$ . Participants were then randomly assigned to the *morally relevant reasons* to

*self-sacrifice condition* or to the *control condition*. Subsequently, and after being informed that other in-group members would be willing to die for the group, participants were asked to report their perceived *confidence to delay self-sacrifice* using the following 7-point (1 = Strongly Disagree, 7 = Strongly Agree) Likert scale: "I'm confident enough to withhold my sacrifice till next time if there are others who are willing to get involved now". Additionally, participants completed the four-item *Need for Uniqueness scale* from Snyder and Fromkin (1977), (e.g. "I have a high need for uniqueness"),  $\alpha = .77$ . Next, participants completed the willingness to fight and die scale, adapted from Swann et al. (2009),  $\alpha = .81$ .

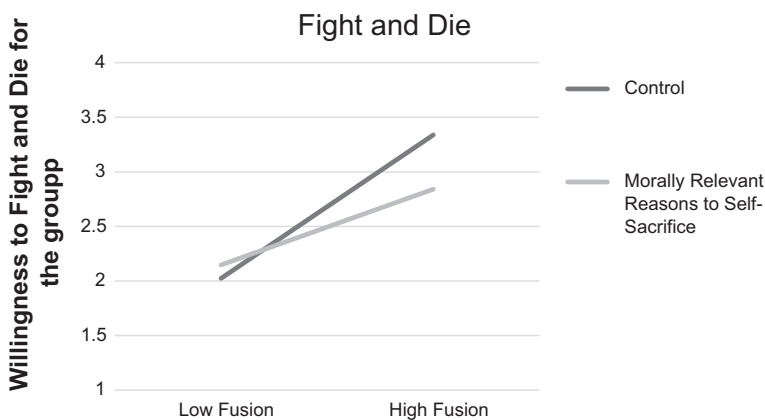
Finally, as an ancillary measure, participants responded to the following item: "I thoroughly read and understood the text I was just shown" on a scale ranging from 1 (*totally disagree*) to 7 (*totally agree*). A linear regression analyses including fusion (centered), self-sacrifice rationale (effect coded, -1 control, 1 morally relevant reasons to self-sacrifice), and its interaction on the ancillary measure yielded no significant effects,  $B < .14$ ,  $t(151) < .96$ ,  $p > .335$  indicating that neither self-sacrifice rationale nor the level of identity fusion moderated the comprehension of the experimental manipulation. An additional one sample t-test comparing the mid-point of the scale (3.5) with the average score of the comprehension measure indicated that participants reported a significantly higher than mid-point level of understanding of the information, ( $M = 5.53$ ,  $SD = .72$ ),  $t(144) = 33.64$ ,  $p < .001$ .

## Results

### Willingness to fight and die for the group

A linear regression analyses including identity fusion (centered), self-sacrifice rationale (effect coded, -1 control, 1, morally relevant reasons to self-sacrifice), and its interaction, revealed a significant main effect of identity fusion on willingness to fight and die,  $B = .40$ ,  $t(151) = 7.53$ ,  $p < .001$ , 95% CI: .2959, .5063. No main effect of self-sacrifice rationale emerged,  $B = -.18$ ,  $t(151) = -1.45$ ,  $p = .149$ .

More critical to our primary concerns, the interaction between identity fusion and self-sacrifice rationale was significant,  $B = -.25$ ,  $t(151) = -2.41$ ,  $p = .016$ , 95% CI:  $-.4663$ ,  $-.0471$ . As can be seen in Figure 3, identity fusion was significantly more predictive of willingness



**Figure 3.** Willingness to fight and die for the group as a function of identity fusion and other's reasons to self-sacrifice for in-group members (Study 3).

to fight and die for the group in the control condition,  $B = .54$ ,  $t(151) = 7.19$ ,  $p < .001$ , 95% CI: .3931, .6906, than in the morally relevant reasons to self-sacrifice condition,  $B = .28$ ,  $t(151) = 3.81$ ,  $p < .001$ , 95% CI: .1375, .4329.

Once again replicating the pattern that emerged in Studies 1 and 2, among participants who scored relatively high in identity fusion (+1SD), those assigned to the control condition reported greater willingness to fight and die for their group than those assigned to the morally relevant reasons condition,  $B = -.49$ ,  $t(151) = -2.73$ ,  $p = .007$ , 95% CI:  $-.8592$ ,  $-.1384$ . In contrast, among participants who scored relatively low in identity fusion (-1SD) no significant differences emerged in willingness to fight and die between the control condition and the morally relevant reasons condition,  $B = .12$ ,  $t(151) = .68$ ,  $p = .495$ , 95% CI:  $-.22354$ ,  $.4845$ .

### *Need for uniqueness*

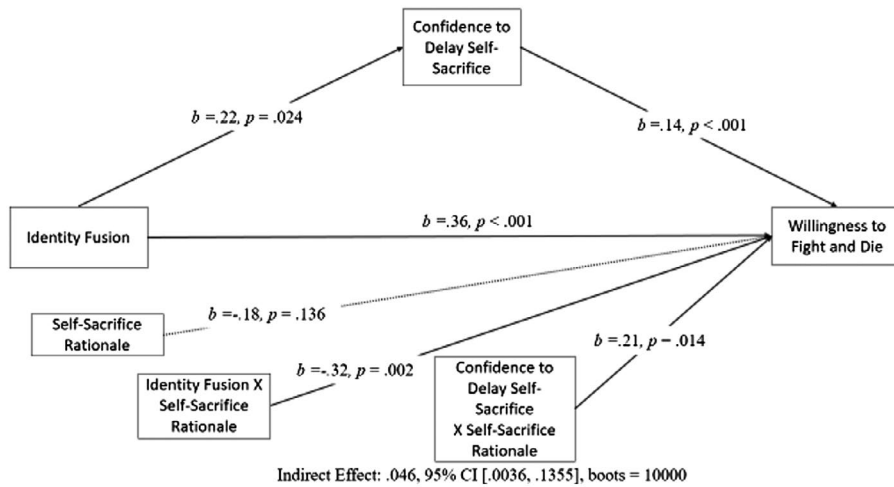
A linear regression analyses including identity fusion (centered), self-sacrifice rationale (effect coded, -1 control, 1, morally relevant reasons to self-sacrifice), and its interaction revealed no significant effects on need for uniqueness,  $Bs < .06$ ,  $ts(151) < .66$ ,  $ps > .505$ .

### *Confidence to delay self-sacrifice*

A linear regression analyses on the confidence to delay self-sacrifice revealed a significant main effect of identity fusion,  $B = .22$ ,  $t(151) = 2.31$ ,  $p = .021$ , 95% CI: .0334, .4209, indicating that strongly fused participants reported greater confidence that their self-sacrifice could be delayed after being informed that more people were willing to self-sacrifice now. No further effects reached significance,  $Bs < .12$ ,  $ts(151) < .65$ ,  $ps > .513$ .

### *Confidence to delay self-sacrifice mediates the interactive effect of identity fusion and others' reasons for self-sacrifice on willingness to fight and die*

Our next step was to examine whether the confidence to delay self-sacrifice mediated the effect of identity fusion on willingness to fight and die for the group, and if this effect was moderated by others' reasons for self-sacrifice. In particular, following Hayes (2017), we conducted a bootstrapping test ( $n$  boots = 10,000) using the PROCESS macro for SPSS to test whether sacrifice rationale moderated both the direct effect of both identity fusion and confidence to delay self-sacrifice on the dependent variable (i.e., willingness to fight and die), and whether the confidence  $\times$  reasons two-way interaction on the dependent variable mediated the identity fusion  $\times$  reasons two-way interaction on the dependent variable (see Hayes, 2016, Model 15). As seen in Figure 4, this analysis confirmed that the indirect effect of identity fusion on willingness to fight and die for the group through the confidence to delay self-sacrifice path was significant,  $IE = .046$ , 95% CI: .0025, .1498. Additionally, PROCESS provided an index of conditional indirect effects of identity fusion on willingness to fight and die in the two experimental conditions, revealing that the indirect path was significant through the confidence to delay self-sacrifice in the morally relevant reasons condition,  $IE = .046$ , 95% CI: .0050, .1301, but not in the control condition,  $IE = .000$ , 95% CI:  $-.0372$ ,  $.0368$ . Others' reasons for self-sacrifice moderated the effect of confidence to delay self-sacrifice on willingness to fight and die as well as the direct effect of identity fusion on willingness to fight and die. That is, strongly fused participants showed greater levels of confidence to delay self-sacrifice. But that confidence only mediates the effects of identity fusion on willingness to fight and die in the morally relevant reasons condition, suggesting that this



**Figure 4.** Second-stage moderated mediation model with identity fusion and self-sacrifice rationale as predictors, confidence to delay self-sacrifice as the mediator and willingness to fight and die as the dependent variable (Study 3) (PROCESS macro, Model 15).

attenuation is indeed a consequence of strongly fused individuals' high confidence to delay self-sacrifice if others are willing to step up now.

## Discussion

Study 3 provides another replication of the interaction between identity fusion and self-sacrifice rationale on willingness to fight and die for the group. Once again, strongly fused participants exhibited lower levels of willingness to fight and die for the group when they were informed that other fused individuals were willing to self-sacrifice for morally relevant reasons compared to a control condition. However, among weakly fused participants, no difference in willingness to fight and die emerged across levels of self-sacrifice rationale. Importantly, Study 3 examined two potential mechanisms for this effect: need for uniqueness and confidence to delay self-sacrifice.

The results of this study show that the attenuation of willingness to fight and die displayed by strongly fused participants is not related to need for uniqueness, implying that fused identities may already meet the need for optimal distinctiveness (for a more detailed explanation of this notion, see the relational ties principle of identity fusion, Swann et al., 2012). However, our results provide some initial support consistent with the notion that strongly fused participants are confident enough to delay self-sacrifice if necessary, and therefore reduced their willingness to fight and die for the group after learning that other fused individuals would do it for morally relevant reasons. Lastly, the high level of confidence reported by strongly fused individuals in this study also rules out the possibility that fused participants in the morally relevant condition may have temporarily reduced their levels of fusion with the group as a response to the reasons provided in the message.

## General discussion

The present investigation addressed for the first time the question of how fused individuals would react to the in-group devotion expressed by others. We tested the role of others' reasons behind sacrifice because past research suggested that they can play a role in self-justifications of sacrifices (Swann, Gómez et al., 2014). We found that others reasons matter for self-sacrifice. Being informed that other fused members are also willing to self-sacrifice for the group for moral reasons attenuated their willingness to fight and die for the group. Moreover, Study 3 suggests that this effect may be due to the confidence to delay the sacrifice of those individuals strongly fused with their group rather than to the reduction in feeling unique.

## Implications and future directions

Our results advance identity fusion theory in at least three ways. These studies represent the first systematic investigation of the effects of identity fusion and the expression of in-group devotion from others and their interactive effects on willingness to fight and die. Second, while previous research has focused on the moderators that *amplify* the effects of fusion, in this case we have identified a process that *attenuates* its effects. Third, and perhaps most notably, our data suggest that confidence to delay one's self-sacrificial behavior mediates the relationship between identify fusion and pro-group behavior.

Put differently, despite strongly fused individuals' predisposition towards extreme pro-group sacrifices, previous literature had already explained how thoughtful and elaborated these predispositions can be for strongly fused individuals (Swann et al., 2010; Swann et al., 2014). This research takes this idea one step further by showing that strongly fused individuals are not only willing to give their life to save in-group members, but they also show the necessary patience to delay such extreme action for when it may best serve the group.

Our research is, of course, not exempt of limitations. First of all, although participants expressed having understood our experimental conditions, we have no evidence of what they actually thought. Future research should look into participants actual perceptions (e.g., thought listing, open essay, think aloud). Along these lines, although previous research provides clear evidence in favor of strongly fused persons having moral reasons for their self-sacrifices, no empirical evidence of what reasons strongly fused people hold for self-sacrifice is provided in this research. Given that the two mechanisms we tested rely on the assumption that the moral reasons provided in the summary passage are similar to the ones strongly fused persons hold to engage in self-sacrifice, future research should test to what extent strongly fused people's reasons for self-sacrifice are indeed similar to the morally relevant reasons provided by others. Lastly, another potential limitation is that our dependent variables do not measure real behavior, but behavioral intentions on hypothetical scenarios. However, past literature has shown that these measures (e.g., willingness to fight and die) do predict actual pro-group behavior (Gómez, Brooks et al., 2011; Swann et al., 2010).

Importantly, not only do these data contribute to the advancement of identity fusion theory, but their implications can also be extended to other relevant contexts. For example, one area that could benefit from examining the role of confidence is the domain of delay of gratification (Mischel, Shoda, & Rodriguez, 1989). The research conducted so far in that domain has demonstrated that for most people to be able to delay gratification they need to engage in extensive amounts of thoughtful self-control and deliberative thinking about

the consequences associated with their actions in order to overcome their impulses (Metcalfe & Mischel, 1999). However, the higher levels of confidence reported by fused individuals may lead to impulse control through a relatively different route. We speculate that individuals may be willing to wait because they are totally convinced that waiting is the best thing for their group, regardless of the level of self-control resources at the moment. This group-related route to delay of gratification delay is unexplored, thus future research should investigate how levels of fusion could play a role in time-framing effects (Loewenstein & Prelec, 1993). Lastly, the higher levels of confidence reported by fused individuals lead us to speculate that confidence may lead to action in certain scenarios, but to pause (or inaction) in others. Research on attitude-behavior correspondence (Rucker, Tormala, Petty, & Briñol Turnes, 2013) has shown that the more confident one is in their attitude, the more their attitude is predictive of their behavior. Taken together, the current work offers initial empirical evidence suggesting that, under some circumstances, high confidence might lead to reducing and/or delaying immediate action in favor of later consistent-behavior (for another recent example of confidence reducing action, see Durso, Briñol, & Petty, 2016).

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### References

- Besta, T., Gómez, A., & Vázquez, A. (2014). Readiness to deny group's wrongdoing and willingness to fight for its members: The role of Poles' identity fusion with the country and religious group. *Current Issues in Personality Psychology*, 1, 49–55. doi:10.5114/cipp.2014.43101
- Durso, G. R., Briñol, P., & Petty, R. E. (2016). From power to inaction: Ambivalence gives pause to the powerful. *Psychological Science*, 27(12), 1660–1666. doi:10.1177/09567976166669947
- Gawronski, B., Armstrong, J., Conway, P., Friesdorf, R., & Hütter, M. (2017). Consequences, norms, and generalized inaction in moral dilemmas: The CNI model of moral decision-making. *Journal of Personality and Social Psychology*, 113(3), 343–376. doi:10.1037/pspa0000086
- Gómez, A., 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. doi:10.1037/a0022642
- Gómez, A., Morales, J. F., Hart, S., Vázquez, A., & Swann, W. B., Jr. (2011). Rejected and excluded forevermore, but even more devoted: Irrevocable ostracism intensifies loyalty to the group among identity fused persons. *Personality and Social Psychology Bulletin*, 37, 1574–1586. doi:10.1177/0146167211424580
- Gómez, A., & Vázquez, A. (2015). The power of 'feeling one' with a group: Identity fusion and extreme pro-group behaviors. *International Journal of Social Psychology*, 30, 481–511. doi:10.1080/02134748.2015.1065089
- Hayes, A. F. (2016). *PROCESS macro for SPSS and SAS* (Version 2.16) [Computer software].
- Hayes, A. F. (2017). Partial, conditional, and moderated mediation: Quantification, inference, and interpretation. *Communication Monographs*, 1–37. doi:10.1080/03637751.2017.1352100
- Hayes, A. F., & Montoya, A. K. (2017). A tutorial on testing, visualizing, and probing an interaction involving a multicategorical variable in linear regression analysis. *Communication Methods and Measures*, 11(1), 1–30. doi:10.1080/19312458.2016.1271116

- Loewenstein, G. F., & Prelec, D. (1993). Preferences for sequences of outcomes. *Psychological Review*, 100(1), 91–108. doi:10.1037/0033-295X.100.1.91
- Metcalf, J., & Mischel, W. (1999). A hot/cool-system analysis of delay of gratification: Dynamics of willpower. *Psychological Review*, 106(1), 3–19. doi:10.1037/0033-295X.106.1.3
- Mischel, W., Shoda, Y., & Rodriguez, M. L. (1989). Delay of gratification in children. *Science*, 244(4907), 933–938.
- Rucker, D. D., Tormala, Z. L., Petty, R. E., & Briñol Turnes, P. (2013). Consumer conviction and commitment: An appraisal-based framework for attitude certainty. *Journal of Consumer Psychology*, 24(1), 119–136. doi:10.1016/j.jcps.2013.07.001
- Snyder, C. R., & Fromkin, H. L. (1977). Abnormality as a positive characteristic: The development and validation of a scale measuring need for uniqueness. *Journal of Abnormal Psychology*, 86(5), 518–527. doi:10.1037/0021-843X.86.5.518
- Swann, W. B., Jr., Buhrmester, M. D., Gómez, A., Jetten, J., Bastian, B., Vázquez, A., ... Zhang, A. (2014). What makes a group worth dying for? Identity fusion fosters perception of familial ties, promoting self-sacrifice. *Journal of Personality and Social Psychology*, 106, 912–926. doi:10.1037/a0036089
- Swann, W. B., Jr., Gómez, Á., Buhrmester, M. D., López-Rodríguez, L., Jiménez, J., & Vázquez, A. (2014). Contemplating the ultimate sacrifice: Identity fusion channels pro-group affect, cognition, and moral decision making. *Journal of Personality and Social Psychology*, 106, 713–727. doi:10.1037/a0035809
- Swann, W. B., Jr., Gómez, A., Huici, C., Morales, J., & Hixon, J. G. (2010). Identity fusion and self-sacrifice: Arousal as a catalyst of pro-group fighting, dying, and helping behavior. *Journal of Personality and Social Psychology*, 99, 824–841. doi:10.1037/a0020014
- Swann, W. B., Jr., Gómez, A., Seyle, D. C., Morales, J., & 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. doi:10.1037/a0013668
- Swann, W. B., Jr., Jetten, J., Gómez, A., Whitehouse, H., & Bastian, B. (2012). When group membership gets personal: A theory of identity fusion. *Psychological Review*, 119, 441–456. doi:10.1037/a0028589