

Winning at any cost: Identity fusion, group essence, and maximizing ingroup advantage

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## Abstract

From verbal abuse to physical intimidation of opponents, some ingroup members seek to maximize their group's competitive edge regardless of personal repercussions. What motivates such extreme commitment? Based on identity fusion theory, we argue that strongly fused persons seek ingroup victory at any cost when they believe that a competition's outcome affects the group's essence. Two studies, conducted across four countries and in two sports contexts, revealed that fused persons who believed one's national sport constituted part of the nation's essence were especially likely to maximize their ingroup's advantage over the outgroup, even when doing so came at a personal cost and harmed the outgroup. Together, our findings shed new light on the motives of fused persons in intergroup conflict.

**Keywords:** Identity fusion, intergroup conflict, social identity, outgroup hostility

When fierce rivals clash, members of both sides seek out opportunities to maximize their side's chances of victory. Some group members, however, are willing to go to extremes. Take for instance, the infamous "Soccer War" between El Salvador and Honduras in 1969. Economic and ethnic tensions between the two nations reached boiling point when qualifying for the World Cup, soccer's pinnacle international tournament. The night before a key match, Salvadoran fans ensured a sleepless night for the Honduran players by throwing rocks through their hotel windows and playing horns and drums loudly. Honduras lost the match, violence between citizens escalated quickly, and a brief hundred-hour war ensued (Bertoli, 2017). What motivates group members, such as these fans, to go to such extreme lengths to give their group an advantage? Guided by identity fusion theory (Swann, Jetten, Gomez, Whitehouse, & Bastian, 2012), we propose that when persons are deeply aligned with an ingroup and believe that a competitor threatens the group's very essence, they will seek victory at any cost. We begin with a brief overview of identity fusion before discussing the role of shared essence in promoting ingroup advantage.

### **Identity Fusion**

The identity fusion construct is most succinctly defined as a visceral sense of oneness with a group (Buhrmester & Swann, 2015; Swann, Gomez, Seyle, Huici, & Morales, 2009). The oneness experienced by strongly fused persons refers to the tight connection between one's personal identity (i.e., individuating self-aspects) and a social identity (i.e., group-derived self-aspects). The bond experienced by strongly fused persons fosters a heightened sense of agency and feelings of invulnerability (Gómez, Brooks, Buhrmester, Vazquez, Jetten, & Swann, 2011) as well as the perception that fellow group members are kin-like (Buhrmester, Fraser, Lanman, Whitehouse, & Swann, 2015). The concept of oneness at the heart of identity fusion also refers to viewing personal and social identities as synergistic,

opposed to antagonistic, as past social identity formulations have assumed (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987).

Identity fusion has been a particularly important concept for understanding the motives underlying extreme pro-group actions, including self-sacrifice (Swann, Buhrmester, Gomez, Jetten, Bastian, Vazquez, et al., 2014a). For example, in variations on the classic trolley dilemma (Foot, 1967), strongly fused persons were especially willing to endorse sacrificing their own lives to save the lives of imperiled ingroup members (Swann, Gomez, Dovidio, Hart, & Jetten, 2010; Swann, Gómez, López, Jiménez, & Buhrmester, 2014b). Strongly fused persons also put their words into action. For instance, fusion to one's combat unit motivated revolutionary combatants to fight on the frontlines rather than assume less risky support roles (Whitehouse, McQuinn, Buhrmester, & Swann, 2014). And more recently, researchers have found that fusion to one's religion motivated retribution-seeking actions (Fredman, Bastian, & Swann, 2017).

While past work shows that fusion can motivate a broad range of extreme pro-group actions, one should not misconstrue fusion as motivating indiscriminate sacrifice at every opportunity. If this were true, fusion would be evolutionarily maladaptive, increasing the odds of an early exit from the gene pool. Recent computational models, however, suggest just the opposite; fusion may be evolutionarily advantageous (Whitehouse, Jong, Buhrmester, Gomez, Bastian, Kavanagh et al., 2017). In fact, growing evidence suggests that fused persons are sensitive to contextual factors when deciding whether to engage in pro-group action. For example, Fredman et al. (2017) found that endorsement of hostile policies against an outgroup was especially high amongst fused persons when existential threats were salient. Parades et al. (in press) show that when fused persons learn that other deeply committed group members plan to self-sacrifice to save ingroup members, fused persons resist the urge to sacrifice themselves unnecessarily. And most pertinent to our studies, Swann et al. (2014a)

found that fused persons were especially willing to endorse fighting and dying for their group when aspects of the group's shared essence were made salient.

### **Shared Essence**

Building on Swann et al. (2014a), we propose that individual perceptions of shared group essence are a key moderator of fusion's effects on extreme pro-group action. Shared essence refers to qualities of a group that capture its very nature, without which the group would be fundamentally altered, and differentiate it from outgroups (Swann et al., 2014a). Past work indicates that perceptions of shared essence are composed of one or two types of qualities: shared biological qualities such as genes (Medin & Ortony, 1989; Vazquez, Gomez, Ordonana, Swann, & Whitehouse, 2017; Whitehouse et al., 2017) and shared personally self-defining experiences, such as memories for group-defining events (Whitehouse & Lanman, 2014; Whitehouse et al. 2017). There is also, however, some evidence that shared essence may be associated with social qualities such as social class (Morton, Postmes, Haslam, & Hornsey, 2009). Moreover, noting that perceptions of shared essence are subjective (i.e., in the eye of the beholder), Swann et al. (2014a) have argued that shared essence may be composed of broader concepts that have special meaning to group members (e.g., freedom, democracy, and liberty in the U.S.). We propose that the broader shared essence concepts described by Swann et al. (2014a) are often *symbolically represented* by physical objects, people, places, and events. For instance, physical objects such as group flags or historical artifacts may be considered by some to constitute part of a group's shared essence because of their symbolic significance (Welch, 2000). Some individuals, such as Martin Luther King, Jr. and places, such as Selma, Alabama, may also be considered by some to constitute a group's shared essence because of what they symbolically represent, e.g., the struggle for racial justice and equality (Rhodan, 2015). The symbolic representations of a group's shared essence are often the product of emotionally intense experiences that similarly affect group

members (Whitehouse & Lanman, 2014). For instance, Selma is seen by many as part of the essence of the civil rights movement because many Americans via the media shared in the horrors endured there during the “Bloody Sunday” march in 1965 (Davis, 1999).

In the current investigation, we examined symbolic representations of shared essence present in many countries – national sports. National sports are considered an intrinsic and significant part of many countries, and thus overlap highly with our conceptualization of group essence (Allison & Monnington, 2002; Archetti, 1995). This context was chosen because national sports competitions involve intense rivalries that produce a form of extreme action that identity fusion researchers have yet to explore – maximizing the ingroup’s competitive advantage over an outgroup. Advantage seeking of this type is important because it often entails hostile, even illegal outgroup actions that result in negative personal consequences (e.g., harassing or physically harming outgroup players, bribing referees, etc.). And although group identification may motivate hostile outgroup action when there are no personal costs (Wann, Hunter, Ryan, & Wright, 2001), dozens of studies show that fusion is a superior predictor of group actions involving personal risks and costs (see Buhrmester & Swann, 2015 for a review).

### **Current Studies**

Overall, we hypothesized that fusion to one’s country would predict the extent to which an individual seeks to maximize the ingroup’s competitive edge. However, this prediction comes with a key caveat: we should see advantage seeking only amongst fused persons who also believe that part of the group’s essence is threatened. If shared essence is the foundation upon which identity fusion is built, then to threaten part of that essence is akin to destabilizing part of the foundation and risking that the structure could collapse (Swann et al., 2011). Given that fused persons find decreasing their commitment to the group exceptionally aversive, going so far as to *increase* their willingness to die for the group after

being ostracized by the ingroup (Gomez et al., 2011), strongly fused persons should seek to combat perceived threats to group essence by any and all means. Conversely, strongly fused persons who do not perceive the situation as containing a threat to the group's essence may respond with considerably less defensiveness because they see relatively little at stake. In short, strongly fused persons pick their battles, and do so according to individual perceptions of the group's essence. We examined this account across two studies.

In Study 1, we first aimed to examine whether fusion to one's nation predicted maximizing ingroup advantage in a national sport context in which most, if not all, members perceive the national sport as part of the group's essence (soccer in England, Brazil, and Spain). In Study 2, we sought to extend our findings to a different national sport context – baseball in the U.S. – as well as examine the moderating role of individual perceptions of the sport as part of the nation's essence. Study 2 also examined the alternative hypothesis that effects of fusion on ingroup advantage seeking may be accounted for by trait hypercompetitiveness.

We chose to examine fusion to country rather than fusion to national sports for two reasons. First, we believe that our focus on fusion to nation and national essence – an instance of “extended fusion” (Swann et al., 2011) – represents a more basic and generalizable framework than focusing on fusion to a smaller, specific group (i.e., local fusion to a specific team). Nations, relative to sports teams, offer a much broader array of experiences upon which shared essence can develop. This broad array increases the likelihood that group members develop their own, unique bases of shared essence to the group. Without this within-group variability in shared essence perceptions, there would be little point in examining it as a moderator, as we have done in Study 2. Second, although some bases of shared essence are represented by a subgroup of the broader group (e.g., national sports team is a subgroup of the entire nation), many specific essence perceptions have no obvious sub-

group attached them. Take concepts like democracy or free-market capitalism for instance. Presumably many Americans believe these concepts are part of the nation's essence, yet we would not say that they are fused *to* democracy or capitalism, as these are abstractions, not concrete groups. Instead, we believe the more natural level of analysis is to examine fusion to a coherent group (i.e., nation) and perceptions of group aspects as part of the group's essence.

### **Study 1**

Study 1 was conducted with participants from England, Spain, and Brazil. We chose these countries because national soccer in all three is undoubtedly perceived as part of each nation's essence. All three countries have rich soccer histories dating over 100 years and produce popular, top-tier professional players. All three have national soccer teams that have regularly qualified for the World Cup and have won the tournament at least once in the last sixty years. Without question, soccer is the most popular sport in all three nations, and they all consider soccer to be their national sport (notwithstanding some dispute as to whether England considers cricket its *official* national sport over soccer).

The context of international soccer was also chosen because soccer rivalries in these countries entail acutely high stakes. For instance, failure to qualify for the World Cup impacts not just the teams (e.g., firing of coaches and players) but may also impact broader soccer communities (e.g., decreased youth and fan interest in the sport). Given these conditions, we assumed that making the intergroup context salient would sufficiently induce threat to perceived essence as we intended. Therefore, we designed our outcome measure (described below) to focus on soccer in each country. We hypothesized that fusion to one's country would predict maximizing a competitive advantage for soccer players from one's own country over players from other countries, even when doing so would mean foregoing a personal monetary gain *and* would directly harm the outgroup.



## Methods

**Participants.** We recruited participants from England, Spain, and Brazil (total  $N = 754$ ). Overall mean age was 32.9 years ( $SD = 12.4$ ), and 54% were female. Any participants who indicated a different nationality other than the nationality under study or were under the age of 18 were not allowed to complete the study. Participants completed the study online and were recruited via a mix of social media advertisements (i.e., Facebook, Twitter, WhatsApp), community and student mailing lists, and university participant pools. For both studies, ethical approval was obtained from Oxford's School of Anthropology and Museum of Ethnography Research Ethics Committee (SAME REC). Informed consent was completed prior to the start of the survey, and participants were thanked and debriefed at the end of the survey.

**Procedure.** All measures were translated and back-translated from English into participants' native languages (Brazilian Portuguese and Spanish) by bilingual speakers. Participants first completed the 7-item verbal fusion scale in reference to their country (Gómez et al., 2011;  $\alpha = .89$ ). Participants then completed an inter-group donations measure based on Swann et al. (2010). Participants were instructed that they were endowed with £5 (or equivalent Brazilian/Spanish currency) and must allocate the amount to two football charities as they saw fit. One charity was dedicated to aiding youth football in the participant's own country and the other in different countries. Participants could divide the allocation however they desired (i.e., equally or unequally to their ingroup vs. outgroup charity). We chose to focus on charitable giving to youth in the scenarios for Study 1 and 2 because this situation is relatively realistic compared to situations involving the national teams themselves. We reasoned that charitable giving to national teams would be seen as a relative drop in the bucket given the large amounts of money already invested in the teams. It is well known that strong youth programs, often underfunded, provide the foundation for

successful national teams, thus it made sense to focus on youth sports contexts. We worded the task as follows: “The UK/Spanish/Brazilian government department that oversees schooling gives our research project [monetary amount] for each participant who completes our research, which we usually donate to different social organizations. In this case, you can choose to donate all the money to one organization or split the money between two organizations. Both organizations use sport to promote the integration of young people at risk of social exclusion. The first organization helps [ingroup, i.e. English/Spanish/Brazilian] junior players to develop their sporting and academic career by providing funding and advice. The second organization helps junior players from different countries who want to develop their career in England/Spain/Brazil. How would you like to allocate the money? (The total amount must come to £5 exactly) 1) Help junior players from [my country -- England/Spain/Brazil] [Box where participants can enter 0 - £5], or 2) Help junior players from different countries [Box where participants can enter 0 - £5].” At the end of the survey, participants indicated their age, gender and e-mail. They were also informed that this survey was part of a larger longitudinal investigation and would be contacted to complete surveys again in the future. Other measures serving purposes different from those of this article were collected and thus are not reported here.

Participants were invited to complete a second survey 18 months after the initial one. Although the attrition rate was unfortunately high (72%, leaving a total  $N = 211$ ), concerns about biased sampling were mitigated by findings that indicated that participants who returned did not differ from those who did not return with respect to age, gender, or fusion ( $t$ 's  $< 1.05$ ,  $p$ 's  $> .29$ ).

As part of the follow-up survey, participants completed an abbreviated version of the Inter-group Prisoner's Dilemma Maximising Difference (IPD-MD) measure (Halevy, Bornstein, & Sagiv, 2008). Participants were instructed to imagine that they were endowed

with £10 (or equivalent Brazilian/Spanish currency) that they must allocate to: 1) themselves (the selfish choice), 2) a fund that aids youth football in their home country (the ingroup preference choice), or 3) the same fund as (2), but in addition, £10 would be *removed* from a fund that aids youth players from different countries (the maximizing difference choice). The wording was as follows: “Imagine there are two funds. One fund helps [ingroup] junior players to develop their sporting and academic career by providing funding and advice. The second helps junior players from different countries who want to develop their career in your country. Each fund has a pot which can increase and decrease in value. You have one token. Each token is worth £10. What will you do with the token? 1) Keep the token, I receive £10. 2) Put the token in the [ingroup] pot, the junior players from [your ingroup] receive £10, or 3) Put the token in the [ingroup] pot, the junior players from [your ingroup] receive £10 and the junior players from other different countries lose £10.”

Our IPD-MD measure reflects three different motives. The first choice – keep the money for oneself – obviously reflects a self-serving motivation. The second choice – donate the money to the ingroup – reflects a desire to (selflessly) aid the ingroup by increasing the absolute gain of the group (i.e., the total amount the ingroup fund receives, ignoring the outgroup). The third choice – donate the money to the ingroup and simultaneously deduct the same amount from the outgroup – reflects outgroup aggression by seeking to maximize the relative gain of the ingroup over the outgroup. Past research using the IPD-MD paradigm suggests that in a minimal groups context, very few participants choose the third, aggressive option (Halevy et al., 2008; Weisel & Bohm, 2015). In a context involving established groups and rivalries, however, we predicted that strong fusion leads to greater than floor levels of aggression on the measure.

## **Results**

We first examined zero-order relationships between fusion and demographic variables (age, gender, and nationality). Brazilian participants reported higher fusion,  $M = 3.32$  (1.46), than Spanish,  $M = 2.78$  (1.35), and English participants,  $M = 2.69$  (1.29),  $F(2, 751) = 15.60$ ,  $p < .01$ . Age and gender were unrelated to fusion,  $|r|$ 's  $< .05$ .

To test our hypothesis that fusion would predict the ingroup maximizing outcome from the initial survey, we conducted a multiple regression with ingroup maximizing as the outcome and fusion, age, and gender as predictors. As hypothesized, fusion predicted the outcome, unstandardized  $b = 0.25$ ,  $SE = .03$ ,  $t(750) = 7.61$ ,  $p < .001$ , indicating that strongly fused persons donated more to the ingroup relative to the outgroup than weakly fused persons. There was also an effect of age,  $b = 0.01$ ,  $SE = .004$ ,  $t(750) = 2.14$ ,  $p = .03$ , indicating that older participants donated more to the ingroup than outgroup compared to younger participants. In addition, there was an effect of gender,  $b = -0.20$ ,  $SE = .09$ ,  $t(750) = -2.20$ ,  $p = .03$ , indicating that men donated more to the ingroup than outgroup compared to women. We then added participant nationality to the model and included the two-way fusion by nationality interaction term, but found no main or interaction effects with regard to nationality,  $|t|$ 's  $< 1.7$ ,  $p$ 's  $> .10$ .

On the outcome measure, 21% of participants gave the entire allotment to their ingroup, 38% split the allotment evenly, and only 5% gave the entire allotment to their outgroup. Although a minority of respondents chose to maximize the ingroup's advantage over the outgroup (21%), that this number was as high as it was still surprised us, considering that the scenario involved *philanthropy for needy children* – a topic that conceivably makes fairness norms salient and thus deters ingroup advantage-seeking. Fused persons, apparently, were undeterred.

To examine whether fusion also predicted the most extreme pro-group favoring allocation (i.e., giving all money to the ingroup and none to the outgroup), we re-coded

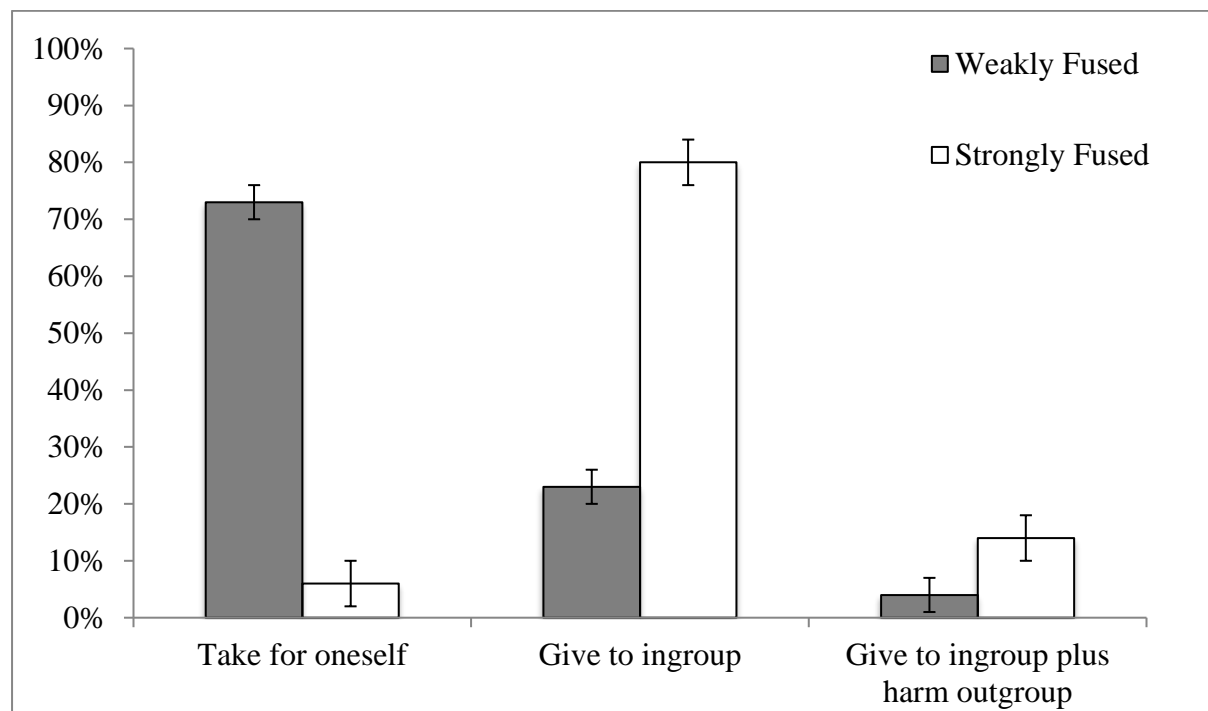
decisions to give the entire allotment to the ingroup as ‘1’ and all other allotments as ‘0’. In a logistic regression, fusion predicted this dichotomous outcome,  $b = 0.28$ ,  $SE = .06$ , Wald  $X^2(1) = 19.81$ ,  $p < .001$ ,  $OR = 1.32$ , such that the model predicted a 27% probability that strongly fused persons (+1SD) would choose to give the entire allocation to the ingroup, whereas the model predicted a 14% probability that weakly fused persons (-1SD) would choose to give the entire allocation to the ingroup.

While these results were consistent with our argument, the outcome measure merely tapped into participants’ feelings toward the ingroup relative to the outgroup. The measure did not involve any actual *cost* to the participant, nor did it involve a clear option reflecting a desire to *harm* the outgroup. The brief IPD-MD measure in the follow-up survey allowed us to examine these particular motives.

To test our hypothesis that fusion to one’s country would predict maximizing the advantage for one’s own country’s players, even when doing so would mean foregoing a personal monetary gain *and* would directly hurt the outgroup, we conducted a trinomial logistic regression. Fusion (measured in the initial survey) was the predictor, with age, gender, and nationality as covariates, and the trichotomous choice to give the money to oneself, give the money to the ingroup, or give the money to the ingroup and take an equal sum away from the outgroup, was the DV. Results revealed that strongly fused persons were more likely than weakly fused persons to choose to donate to the ingroup plus harm the outgroup vs. take the money for oneself,  $b = -0.86$ ,  $SE = .26$ , Wald  $X^2(1) = 11.25$ ,  $p < .01$ ,  $OR = 0.42$ , and to choose to donate to the ingroup plus harm the outgroup vs. donate to the ingroup,  $b = -0.39$ ,  $SE = .18$ , Wald  $X^2(1) = 4.69$ ,  $p = .03$ ,  $OR = 0.68$ . As seen in Figure 1, the model’s predicted probabilities show that strongly fused persons (+1SD) most often chose to donate to the ingroup (80%), followed by the choice to donate to the ingroup plus harm the outgroup (14%), and last, to take the money for oneself (6%). Conversely, weakly fused

persons most often chose to take the money for oneself (73%), followed by the choice to donate to the ingroup (23%), and last, to donate to the ingroup plus harm the outgroup (4%). Results also showed that males were more likely than females to donate to the ingroup plus harm the outgroup vs. donate to the ingroup,  $b = -1.81$ ,  $SE = .68$ , Wald  $X^2(1) = 7.10$ ,  $p < .01$ ,  $OR = 0.16$ . The model revealed no effects of age or nationality.

Figure 1. Study 1 Predicted Probabilities for Strong and Weakly Fused Persons on IPD-MD.



Note: Weakly and strongly fused at  $-1$  and  $+1SD$ 's, respectively. 95% CI's represented by bars.

## Discussion

Overall, we found support for the hypothesis that fusion motivates maximizing the ingroup's relative advantage over the outgroup in a competitive context in which part of the group's essence is threatened (i.e., international soccer in three nations that believe soccer is part of their nation's essence). When asked to divide a sum between the ingroup and outgroup, strongly fused people were most likely to donate the entire sum to the ingroup and none to the outgroup. Our abbreviated version of IPD-MD outcome further revealed that

strongly fused persons were especially willing to forego personal monetary gains to maximize the absolute gain of the ingroup and relative gains of the ingroup over the outgroup. Only a minority of strongly fused persons chose the option reflecting outgroup aggression, with the majority choosing to aid the ingroup without harming the outgroup, a finding consistent with previous research in minimal group contexts (Halevy et al., 2008). Nevertheless, strongly fused persons were more than twice as likely than weakly fused persons to choose the outgroup aggression option, suggesting that in a competitive domain involving part of the group's essence, strongly fused persons will maximize the ingroup's advantage even if it involves a personal cost or harming the outgroup.

One limitation of Study 1 was that we assumed that the national sport context was perceived as part of the group's essence. As discussed earlier, perceptions of what constitutes a group's essence may be subjective; while some may strongly believe that a national sport (or any other group aspect) constitutes part of the group's essence, others may strongly believe just the opposite. To examine the role of perceived essence directly, in Study 2 we included a measure of perceived essence and treated it as a moderator in the analyses.

Our version of the IPD-MD measure was also limited in two ways. First, the scenario did not specify a clear outgroup; instead it referred to "other countries." Although in the context of international football, all other countries are conceivably potential threats, we rectified this ambiguity in Study 2 by specifying a single, clearly threatening outgroup. A second limitation of our IPD-MD measure was that it was unlike the original in potentially one key respect. In the original, participants could divide their money to contribute to one, two, or all three options, whereas in our abbreviated version, participants made a single forced choice between the three options (self, ingroup donation, or ingroup donation plus outgroup deduction). Would our findings remain consistent if we utilized a task more like the original? We examine this question in Study 2.

## Study 2

Study 2 had several aims. First, we sought to extend the findings from the prior studies by examining a new context – baseball in the U.S. Baseball is considered the national sport in the U.S.; it was invented in the northeast, with early leagues forming in the mid 19<sup>th</sup> century (Thorn, 2004). However, baseball in recent years has waned in popularity, while other popular U.S. sports, such as American football and basketball, have made claims as the national pastime (Mahler, 2013). Given these circumstances, we chose baseball as our context because we expected that there would be considerable variability in Americans' perceptions of baseball as constituting part of the nation's essence – the key for examining the moderating role of essence perceptions. We predicted that strongly fused Americans who strongly believed that baseball is part of the nation's essence would be most likely to maximize the ingroup's advantage.

In Study 2, we also examined an alternative hypothesis rooted in the literature on dispositional hypercompetitiveness. Horney (1937) first conceptualized hypercompetitiveness as an “indiscriminant need by individuals to compete and win (and avoid losing) at any cost as a means of maintaining or enhancing self-worth, with an attendant orientation of manipulation, aggressiveness, exploitation, and denigration of others across a myriad of situations (p.1).” Horney also argues that hypercompetitiveness is the product of American culture and its tendency to promote competitiveness from an early age across many spheres of socialization (e.g., family, peers, school). Hypercompetitive individuals have also been found to endorse using violence when threatened (Ryckman, Hammer, Kaczor, & Gold, 1990). At first blush then, it seems plausible that an effect of fusion on pro-group outcomes could reflect possible shared variance between fusion and hypercompetitiveness. However, we find this alternative hypothesis unconvincing because the motives underlying



hypercompetitiveness and fusion are quite distinct. Hypercompetitiveness reflects a cross-contextual desire to boost self-worth, whereas fusion reflects a group-specific moral duty to protect the group, irrespective of the outcome for oneself (e.g., Swann et al., 2014b).

Therefore, we hypothesized that although there may be a weak relationship between fusion to the U.S. and hypercompetitive attitudes, the latter would not account for the effect of fusion on our outcome (ingroup advantage- seeking).

## **Methods**

**Participants.** A total of 300 U.S. participants participated on Mechanical Turk (see Buhrmester, Talaifar & Gosling, in press, for a recent evaluation). Note: In both studies, total  $N$ 's exceeded the minimum required sample size of 103 to detect  $f^2 = .15$ , with power = .8,  $p = .05$  with seven predictors – the most we examined in a single analysis – in a multiple regression model. Twelve participants did not complete the survey and 21 more completed the survey in less than five minutes, the minimum time we judged it would take to complete the survey without skimming or not reading items and instructions. Thus, we dropped these participants from the dataset, leaving a final  $N = 267$ , with mean age = 36.6 years ( $SD = 11.7$ ), 56% female, and 69% Caucasian, 8% Hispanic/Latino, 8% African-American, 9% Asian-American, and 6% other/unspecified.

**Measures.** Participants first completed the verbal fusion scale with reference to the U.S. on a 1-7 Likert scale (Gómez et al., 2011;  $\alpha = .93$ ). Next they completed 4 items that we developed to measure the extent to which one perceives a sport – here, baseball – as part of the nation's essence. The *group essence* items were “American baseball captures the very essence of the U.S.”, “Baseball lies at the core of what it means to be American”, “Baseball represents the heart and soul of America”, and “Baseball is an essential part of the U.S.A.” Internal consistency was good,  $\alpha = .91$ .

Participants next completed the hypercompetitive attitude scale developed by Ryckman et al. (1990). Participants rated their level of agreement on a 7-point Likert scale to 26 self-statements, such as “If I can disturb my opponent in some way in order to get the edge in competition, I will do so” and “I find myself turning a friendly game or activity into a serious contest or conflict” ( $\alpha = .91$ ).

Participants were then presented with our modified IPD-MD measure. To make the measure more akin to the original while remaining easy to comprehend and complete within the confines of an online survey, we modified the measure to read as follows: “Imagine there are two funds for broadening the appeal of baseball to youth. One fund helps develop American youth baseball players. The other fund helps develop Cuban youth. Each fund will increase or decrease in value based on decisions made by people in the U.S. and Cuba. You now have \$30 to distribute however you wish. Please enter the amounts you wish to distribute to each pot below: 1) [\$X to give to myself], 2) [\$Y to give to the U.S. fund], and 3) [\$Z to give to the U.S. fund, *and* take away from the Cuban fund].” We chose Cuba as the outgroup because Cuba historically has a strong winning tradition (e.g., most Olympic gold medals in baseball) and has been a historical threat to the U.S. since the Cold War, thus Cuba as an outgroup was considered to be highly threatening. Last, participants completed demographic questions (age, gender coded male ‘1’ and female ‘2’, and a single item measure of political ideology on a 7-point Likert scale with ‘extremely conservative – 1’ and ‘extremely liberal – 7’).

## **Results**

Correlations between all predictor measures are presented in Table 1 below. Two sets of correlations are of particular note. First, as hypothesized, fusion and essence were both weakly positively correlated with hypercompetitive attitudes,  $r$ 's = .13 and .12,  $p < .05$ , respectively. A moderately positive correlation was found between fusion and perceiving

baseball as part of the nation's essence,  $r(265) = .46, p < .01$ . This relationship is consistent with claims that baseball may be considered essential to the U.S., especially amongst strongly fused persons. However, as with the fusion measure, there was considerable variation in responses to the essence scale ( $SD$ 's  $> 1.51$ ), thus allowing us to examine the essence variable as a potential moderator of fusion's effect on the intergroup outcome.

Table 1. Pearson  $r$  correlations, Means, and ( $SD$ )'s of predictor variables in Study 2

	<b>Fusion</b>	<b>Essence</b>	<b>Hyper- comp.</b>	<b>Age</b>	<b>Gender</b>	<b>Poli. Ideo.</b>
<b>Fusion</b>	4.05 (1.51)					
<b>Essence</b>	.46**	4.14 (1.58)				
<b>Hypercomp.</b>	.13*	.12*	3.50 (.93)			
<b>Age</b>	.25**	.19**	-.26**	36.60 (11.73)		
<b>Gender</b>	-.01	.19**	-.16**	.15*	1.56	
<b>Poli. Ideo.</b>	-.30**	-.26**	.04	-.19**	-.02	4.55 (1.70)

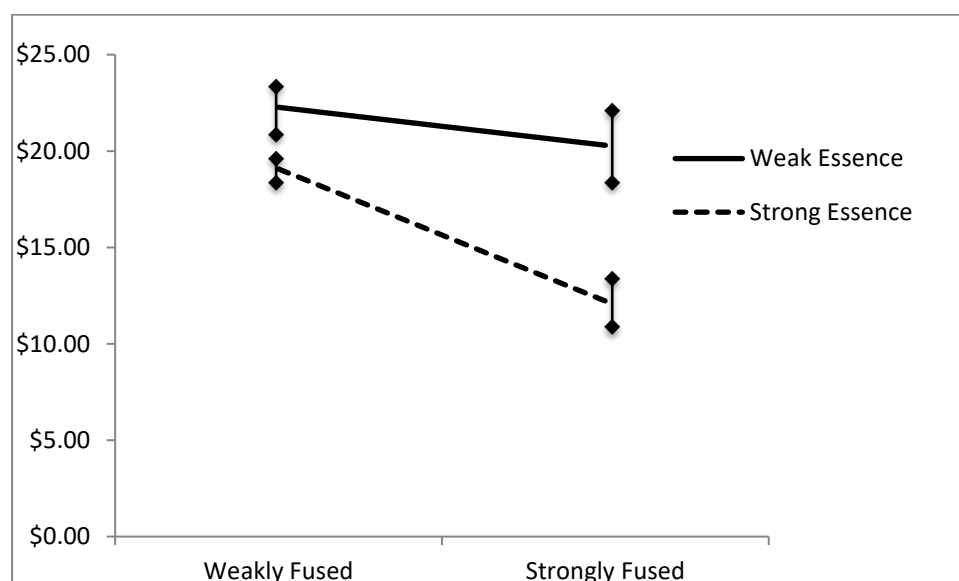
Note: Means and  $SD$ 's along diagonal and  $r$ 's below. \*\* =  $p < .01$ ; \* =  $p < .05$

We next tested our hypothesis that fusion would interact with group essence to predict choices in our IPD-MD measure and do so beyond any effect of hypercompetitiveness, age, gender, or political ideology. To do so, we conducted a series of three multiple regressions. The predictors in each regression were the same: fusion, essence, hypercompetitiveness, age,

gender, ideology, and the fusion x essence interaction term. The outcomes in each were: (1) the amount of money participants chose to keep, (2) the amount of money participants chose to donate to their ingroup, and (3) the amount of money participants chose to donate to their ingroup and simultaneously deduct from the outgroup.<sup>1</sup>

For (1), the analysis revealed a significant fusion x essence interaction,  $b = -0.51$ ,  $SE = .25$ ,  $t(256) = 2.03$ ,  $p = .04$ , which qualified main effects of fusion,  $b = -1.46$ ,  $SE = .47$ ,  $t(256) = -3.13$ ,  $p < .01$ , and essence,  $b = -1.78$ ,  $SE = .46$ ,  $t(256) = -3.90$ ,  $p < .01$ . A simple slopes analysis further revealed that for participants who did not believe baseball was part of the nation's essence (i.e.,  $-1SD$  on the essence measure), fusion was not associated with the amount of money kept for oneself,  $b = -0.65$ ,  $SE = .65$ , *n.s.* However, for participants who did believe baseball was part of the nation's essence (i.e.,  $+1SD$  on the essence measure), amount of money kept for oneself decreased as fusion increased,  $b = -2.28$ ,  $SE = .57$ ,  $t(256) = -3.96$ ,  $p < .01$ . There was a significant main effect of hypercompetitiveness,  $b = 2.21$ ,  $SE = .68$ ,  $t(256) = 3.24$ ,  $p < .01$ , indicating that as hypercompetitiveness increased, amount of money kept for oneself increased (see Figure 2).

Figure 2. Study 2: Fusion X Essence Interaction Predicted Amount Taken for Oneself on IPD-MD.

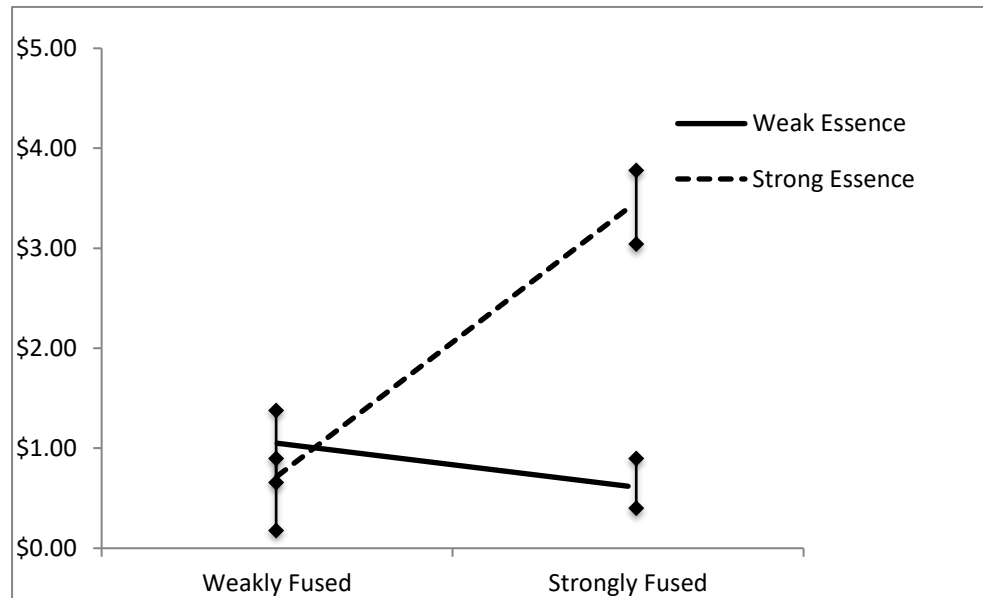


Note: Strongly and weakly fused and strong and weak essence beliefs were based on  $+1SD$  and  $-1SD$ , respectively, for Figures 2-4. 95% CI's represented by bars.

For (2), the analysis revealed main effects of fusion,  $b = 1.09$ ,  $SE = .45$ ,  $t(256) = 2.43$ ,  $p = .01$ , and essence,  $b = 1.40$ ,  $SE = .43$ ,  $t(256) = 3.23$ ,  $p < .01$ , indicating that as fusion and essence each increased, so too did the amount given to the ingroup. There was no interaction,  $p > .40$ , but there was a significant main effect of hypercompetitiveness,  $b = -2.41$ ,  $SE = .67$ ,  $t(256) = -3.63$ ,  $p < .01$ , indicating that as hypercompetitiveness increased, donations to the ingroup decreased.

For (3), the analysis revealed a significant fusion x essence interaction,  $b = 0.33$ ,  $SE = .11$ ,  $t(256) = 3.01$ ,  $p < .01$ , which qualified main effects of fusion,  $b = 0.37$ ,  $SE = .15$ ,  $t(256) = 2.44$ ,  $p = .02$  and essence,  $b = 0.39$ ,  $SE = .15$ ,  $t(256) = 2.51$ ,  $p = .01$ . A simple slopes analysis revealed that for participants who did not believe baseball was part of the nation's essence, fusion was not associated with the amount of money donated to the ingroup and also deducted from the outgroup,  $b = -0.14$ ,  $SE = .19$ , *n.s.* However, for participants who did believe baseball was part of the nation's essence, increased fusion was associated with greater amount of money donated to the ingroup and also deducted from the outgroup,  $b = 0.89$ ,  $SE = .26$ ,  $t = 3.42$ ,  $p < .001$ . There was no main effect of hypercompetitiveness,  $p > .40$  (see Figure 3). In all three analyses in this section, we also did not find effects of age, gender, or political ideology,  $p$ 's  $> .17$ .

Figure 3. Fusion X Essence Interaction Predicted Ingroup Donation Plus Harm Outgroup Amount on IPD-MD.



## Discussion

Study 2's results reaffirmed the key findings from Study 1 in a different national context. Strongly fused persons who saw baseball as part of the U.S.'s essence made especially unselfish decisions in the allocation measure, choosing to keep for themselves roughly half as much money as those who were weakly fused or did not see baseball as part of the nation's essence. Strongly fused persons who saw baseball as part of the nation's essence were also especially aggressive toward the outgroup, choosing to donate three times as much to the fund that hurt the outgroup compared to those who were weakly fused or did not see baseball as part of the nation's essence. Fusion and essence beliefs, but not their interaction, also predicted the amount donated to the ingroup. The null interaction effect may indicate that, at least in this study's context, fusion or strong essence beliefs are sufficient to motivate pro-group behavior that does not harm the outgroup. In contrast, the combination of fusion and strong essence beliefs may be necessary to produce more extreme pro-group behavior that does harm the outgroup.

Results also showed that while hypercompetitiveness was weakly associated with fusion, it did not account for the effects of fusion and essence on the IPD-MD. Instead, hypercompetitiveness motivated greater selfishness and less aid to the ingroup. Apparently, hypercompetitive individuals saw the IPD-MD task as an opportunity to enhance their personal fortunes to the detriment of an ingroup – sentiments that ran counter to that of strongly fused persons.

### **General Discussion**

Across both studies we found consistent support for the hypothesis that strongly fused persons maximize the ingroup's advantage over the outgroup in contexts where the group's essence is threatened. Strongly fused persons were more likely than weakly fused persons to give all of an allocated sum to help ingroup members and none to outgroup members as well as donate to a fund that not only aided the ingroup but also hurt the outgroup (Study 1). These differences emerged only when strongly fused persons saw the national sport as a key part of the nation's essence, and did so beyond the effects of hypercompetitiveness or the demographic variables tested (Study 2). The fact that shared essence is so integral to these findings is particularly important, as it qualifies previous findings showing that fused persons all have a similar propensity to engage in a broad array of extreme pro-group behaviors (see Buhrmester & Swann, 2015, for a review). Here, we found that not all fused persons are alike. While there was a tendency for fused persons to perceive baseball as part of the nation's essence, this sentiment was not shared by all. Fused persons were unwilling to make an extreme choice (i.e., hurting the outgroup while foregoing personal gain) *except* when they also felt that the group's essence was at stake.

Our findings are consistent with a two-level model of identity fusion as it relates to extreme pro-group behavior. At the necessary-and-sufficient level, there are a set of situations in which fusion is both necessary and sufficient to produce extreme pro-group action (e.g.,

self-sacrifice to save an ingroup member's life; Swann et al., 2014b). At the necessary-but-insufficient level, there exist a different set of factors in which fusion is necessary but insufficient to produce extreme pro-group acts (e.g., aggressing against an outgroup in a national sport competition). Previous research on identity fusion has largely focused on the necessary-and-sufficient level, whereas our analysis and some recent others have begun to focus on the necessary-but-insufficient level (e.g., Gómez, Lopez-Rodriguez, Sheikh, Ginges, Waziri et al., 2017). As our results show, one key individual factor concerns the contents of each fused person's own conception of shared essence. There are likely undiscovered other factors as well. For instance, might fused persons in specific group roles lead to different kinds of pro-group outcomes? Identifying the bounds and key factors of each level will help paint a fuller picture of identity fusion and its relationship to extreme pro-group action.

Our focus on the moderating role of shared essence bears some similarity to recent work on sacred values and fusion. Sacred values are defined as “values that a moral community treats as possessing transcendental significance that precludes comparisons, trade-offs, or indeed any mingling with secular values” (Tetlock, 2003, p.320). Like sacred values, shared essence also involves ascribing deep meaning to an abstraction such as a value. However, our conceptualization of shared essence makes no claims about transcendentalism or secularism, and shared essence involves not just values, but other biological and social qualities that can vary in terms of their symbolic representativeness. Thus, sacred values might be seen as a special subset of the larger category of shared essence. In addition, some values that have been interpreted as sacred in recent work (e.g., democracy) seem to deviate significantly from the original definition of sacredness, as they lack apparent transcendental or non-secular qualities, and might be more simply understood as instances of shared essence.

Though our study designs focused on a sports fan perspective, we believe our findings generalize to multiple domains. In college athletics, wealthy “boosters” spend small fortunes



to maximize their university's competitive edge. Many activities are legal, such as donating funds to build state-of-the-art practice facilities, but some activities are illegal and seek to improve one's program at the expense of another (e.g., bribes to recruit players considering other programs or poaching players currently at other programs; Thelin, 1996). Outside of sports, many presumably fused Americans have expressed violent outrage when a symbol of the nation's essence – the American flag – has been desecrated (Welch, 2000). Such extreme activities seem to echo our fused participants' desires to maintain the essence of their group by aggressing against those seen as a threat to their essence.

### **Future Directions and Limitations**

Given the key role of group essence perceptions and fusion in producing outgroup aggression, a remaining question for future research involves discovering how perceptions of shared essence and fusion develop. One emerging answer from Whitehouse and colleagues suggests that especially memorable group experiences (i.e., those that are highly unique and emotionally intense) foster the perception of group essence. When one imputes personal meaning to that group essence and believes that the group has imputed similar meaning, fusion may result (Whitehouse & Lanman, 2014). In support of this perspective, recent evidence suggests that vivid memories of fan experiences with close others are associated with fusion (Newson, Buhrmester, & Whitehouse, 2016). Further research holds promise to shed more light on the precise mechanisms underlying the relationships between shared experiences, essence, and fusion, as well as uncover new pathways to shared essence and fusion.

Our investigation was not without limitations. First, by examining competition between nations, ethnocentrism and xenophobia may explain some of the variance in our outcome measures. We did, however, include a known correlate of both of these constructs – political ideology (Cunningham, Nezlek, & Banaji, 2004) – but did not find any relationships

between ideology and the outcomes. We found a moderate correlation between fusion and ideology suggesting that strongly fused persons tended to be conservative,  $r = -.30$ .

Speculating on the reasons for this relationship is beyond our scope here, but future research should focus on this issue, as political ideologies clearly foster distinct perceptions of shared essence. Future research should also continue to examine the role of threat in relation to identity fusion, especially individual differences in perceived threats. In our studies, the competitive nature of the outcome measures was assumed to induce threat, similar to other outcomes frequently used in identity fusion research (e.g., measures of willingness to fight and die for one's group, Gomez et al., 2011). In addition, we did not contrast fusion with measures of identification to examine the unique variance associated with each. Given that dozens of previous studies have shown that fusion outpredicts identification on a range of extreme pro-group outcomes (see Buhrmester & Swann, 2015 for a review), we deemed it unnecessary to further focus on it in our studies. Last, although we conducted our studies with participants from four nations (UK, Spain, US, and Brazil), we did not sample from any truly non-WEIRD nations (Henrich, Heine, & Norenzayan, 2010). To determine the universality of the models examined here, future research should draw upon non-WEIRD samples.

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

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## Footnotes

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<sup>1</sup> As have others utilizing the IPD outcome measure, we acknowledge that the three regression models here are not entirely independent since the total amount distributed had to add up to a fixed total. Had there been only two pools to distribute to (e.g., self vs group), then one regression model would have been sufficient. However, since there were three pools (self, group, and group plus outgroup deduction), to be thorough we conducted all three analyses (see Halevy et al., 2008).