ABSTRACT

THE IMPACT OF INTERGROUP THREAT ON THE PROCLIVITY TO EXCLUDE POTENTIAL MEMBERS FROM THE INGROUP

by Michael J. Bernstein

The ingroup overexclusion effect (IOE) describes the tendency for individuals to categorize ambiguous targets as outgroup members more readily than as ingroup members. The IOE is especially pronounced for high identifiers because such individuals are driven to protect ingroups from undesirable targets. I investigated the salience of intergroup threat as a moderator of the IOE predicting that it would exacerbate the magnitude of the IOE. In Study 1, intergroup threat was induced by including a specific or no specific outgroup in the categorization task. Results indicated fewer targets were placed in the ingroup in the high-threat (specific outgroup) than in the low-threat condition, but this effect was not moderated by identification. In Study 2, threat was manipulated via descriptions of the outgroup designed to alter perceptions of threat. However, no significant differences in target categorizations occurred. Explanations for the failure to yield the predicted results and future directions are discussed.
THE IMPACT OF INTERGROUP THREAT ON THE PROCLIVITY TO EXCLUDE
POTENTIAL MEMBERS FROM THE INGROUP

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Human beings have an immense drive to affiliate with and form groups (Baumeister & Leary, 1995; Buss, 1990). Such affiliation provides individuals with a framework through which to interpret the often ambiguous and uncertain world. People routinely find themselves interacting with groups and individuals with whom they may not have previous, direct experience, and their affiliations with their own groups give them insight into how they should act towards others and how they should expect to be treated in return (Grieve & Hogg, 1999; Hogg, Sherman, Dierselhuis, Maitner, & Moffitt, 2007; Reid & Hogg, 2005). This affiliation begins when individuals self categorize into groups and, subsequently, a distinction between one’s own group (the ingroup) and others’ (outgroups) emerges (Brewer, 2001; Brewer & Kramer, 1985; Tajfel & Turner, 1979).

Decades of research in social psychology suggests that the way we categorize others, namely as ingroup or outgroup members, has an extremely important effect on how we treat them. Relative to outgroup members, we tend to view ingroup members more positively (Brewer, 1979), to grant them more resources (Tajfel, Billing, Bundy, & Flament, 1971), to regard their work and the products of their work as superior (Feguson & Kelly, 1964), to offer them help more readily (Sturmer, Snyder, Kropp, & Siem, 2006), and to individuate them more and use stereotypes less when processing information about them (Fiske & Neuberg, 1989). On the other hand, individuals categorized as outgroup members are less frequently remembered (Sporer, 2001), are more likely to elicit avoidance behavior (Shah, Brazy, & Higgins, 2004), and are less likely to be trusted (Voci, 2006). Given the obvious benefits and detriments of ingroup versus outgroup categorization respectively, social psychologists have sought to understand why, and under what circumstances, such categorizations are made.

The ingroup overexclusion effect

The ingroup overexclusion effect (IOE) is one phenomenon that describes perceivers’ general tendencies to make ingroup versus outgroup categorizations. In its original form, the IOE was defined as the tendency for individuals to over exclude ambiguous targets from membership in the ingroup (Leyens & Yzerbyt, 1992). Early theorizing in this literature suggested that the IOE occurs because perceivers want to make certain that they do not allow potentially harmful, or otherwise negative, targets into their group. Hence, one strategy that ensures such a goal is to
simply exclude the vast majority of targets from the ingroup. Thus, according to this literature, perceivers will tend to place a majority of targets in the outgroup and be especially cautious when they do place individuals into the ingroup.

In the earliest work illustrating the IOE (Leyens & Yzerbyt, 1992), participants were given profiles of target individuals and asked to categorize them as members of a particular ingroup or outgroup. Each participant was given one piece of information at a time and allowed to make a group membership decision if they wished or get another piece of information. Results showed that providing negative information in the profile led participants to categorize target individuals as outgroup members very quickly. However, when the profile contained positive information, participants requested a great deal of such information before they would categorize that target as an ingroup member. Additionally, perceivers were generally more likely to categorize targets as outgroup members than ingroup members. That is, they tended to overexclude individuals from the ingroup (Leyens & Yzerbyt, 1992).

In follow-up work (Yzerbyt, Leyens, & Bellour, 1995), Walloon (French-speaking Belgian) and Flemish participants were asked to make group categorization decisions after listening to sentences pronounced in French or Dutch by Walloon or Flemish targets. Results indicated (1) that ingroup members were mistakenly categorized as outgroup members very frequently, especially when they spoke short (and thus more ambiguous) sentences in the outgroup language, and (2) that it took longer for individuals to make an ingroup categorization when the target read a sentence in the outgroup language than it took them to make an outgroup categorization when the target read a passage in the ingroup language. Neither the origin of the participants nor the wording of the questions qualified these findings. Yzerbyt and colleagues (1995) suggested that these results further provided evidence for the IOE, as both showed that perceivers were reluctant to place targets into the ingroup.

These and other early findings converged on the notion that individuals tend to be cautious when admitting others into the ingroup. But why should this proclivity occur? Perceivers are motivated to protect the integrity of the ingroup from undesirable others because events that impact it have direct implications for the self (Leyens & Yzerbyt, 1992). This is because much of the individual self is derived from membership in important groups. Indeed, drawing on social identity theory (Tajfel, 1982) and self-categorization theory (Turner, Hogg, Oaks, Reicher, & Wetherell, 1987), Smith and Henry (1996) argued that “the psychological self
extends out beyond the skin to include other people and social groups— that is, ... group memberships become part of the self concept” (p. 635). They found compelling evidence for this notion in their work, which showed that participants were faster to identify traits as self-descriptive or non-descriptive when they perceived the ingroup similarly versus differently. Follow-up work showed the same pattern for attitude objects; that is, perceivers could more quickly report their own liking for an attitude object when they perceived the self and the ingroup shared the same attitude versus a different attitude (Coats, Smith, Claypool, & Banner, 2000). Both of these findings suggest that there is important overlap between the self and the ingroup, and, to the extent that groups are an integral part of the individual self, individuals should be motivated to protect their integrity as a means to protect themselves.

*The role of group identification in the ingroup overexclusion effect*

Of course, the degree to which individuals are motivated to protect their ingroups should necessarily depend on how central and important those ingroups are to the person. All individuals belong to a plethora of different social groups (national, racial, religious, political, occupational, gender, etc.), and it is unlikely that each of these will play a central role in the identity of any single person. For example, some Americans might strongly identify with their national affiliation, whereas others may feel little attachment to it. Group identification is an individual-difference construct that nicely captures this sense of group connection (Branscombe & Wann, 1994; Luhtanen & Crocker, 1992). In general, a highly-identified group member is one who feels quite attached to the group, feels membership in that group is an important part of his or her self concept, and draws positive self regard and esteem from the success and high status of that group (Tajfel, 1982; Tajfel & Turner, 1979). A person who is low in group identification tends to have the opposite of these characteristics. Thus not surprisingly, low and high group identifiers often respond differently to group-relevant events, especially those that necessitate protecting the integrity of the group.

For example, group identification has been shown to influence the magnitude of the black sheep effect (Branscombe, Wann, Noel, & Coleman, 1993; Castano, Paladino, Coull, & Yzerbyt, 2001; Coull, Yzerbyt, Castano, Paladino, & Leemans, 2001), the perception of ingroup homogeneity (Castano & Yzerbyt, 1998; Doosje, Ellemers, & Spears, 1995; Kelly, 1989), and
the degree of ingroup bias (Castano & Yzerbyt, 1998; Jetten, Spears, & Manstead, 1996; Lindeman, 1997). A notable commonality among these phenomena is that they are done in service of protecting the ingroup and/or enhancing its image (Doosje & Ellemers, 1997; Yzerbyt et al., 2001). For example, the Black Sheep effect describes the tendency to evaluate an unlikeable and anti-normative ingroup member more negatively than an unlikeable outgroup member (Marques, Yzerbyt, & Leyens, 1988). This occurs most strongly for high identifiers, who are much harsher in their evaluations of such “black sheep” than are low identifiers. Marques and colleagues (1988) argue that this tendency serves a functional role. The clear, unambiguous derogation of an anti-normative ingroup member affirms the values and standards of the ingroup. By shunning someone who violates these standards, we help ensure that group integrity remains high. This is especially important for high identifiers for whom it is important to protect the positive view of their ingroup and who will be most threatened by an anti-normative group member.

Because those high in group identification care deeply about the group and, as just discussed, engage in group protective measures, it is quite reasonable to suspect that they might also engage in the IOE more so than those low in group identification. Allowing an unfavorable individual into an important group would be akin to a derogation or threat to that group, both of which have been shown to have consequences for the self-esteem of group members (Branscombe & Wann, 1994; Fein & Spencer, 1997; Spencer, Fein, Wolfe, Fong, & Dunn, 1998). For low identifiers, the same threat doesn’t result in a loss of self-esteem because less of their identity is invested in the overall status of the group.

Such reasoning led Castano, Yzerbyt, Bourguignon, and Seron (2002) to hypothesize that one’s identification with a group should moderate the IOE. To investigate this, Castano and colleagues (2002) asked Northern Italian participants to look at a series of male faces, of which some were computer-generated morphs of Southern Italian (North African) and Northern Italian (North European) faces. Participants were tasked with deciding whether each face was that of a Northern (ingroup) or Southern (outgroup) Italian. Results showed that, overall, participants who identified highly with the ingroup were more likely to classify targets as outgroup members than were low identifiers. Moreover, high identifiers categorized a statistical majority of targets as outgroup members (56%), whereas low identifiers did not depart statistically from chance (49%). Additionally, examination of response latencies for categorization decisions showed, among
other interesting effects, that high identifiers were faster to reject an outgroup member than to accept an ingroup member; whereas low identifiers were equally fast to reject an outgroup member and accept an ingroup member. Castano and colleagues argued that this shorter latency to reject an outgroup member than accept an ingroup member indicated a “struggle to protect the ingroup;” a desire high identifiers have that low identifiers do not (p. 320).

Thus, based on these findings, an updated definition of the IOE is that it occurs when individuals who highly identify with a particular group tend to categorize neutral or ambiguous targets as outgroup members more readily than do low identifiers. Or, the IOE can be defined as occurring when high identifiers categorize a majority of individuals among a set of targets as outgroup members, whereas low identifiers categorize equal numbers of individuals as ingroup and outgroup members (Castano et al., 2002).

**Intergroup threat as a possible moderator of the IOE: Aims of the current studies**

The purpose of the current research is to determine if manipulations of intergroup threat moderate the IOE. If the IOE occurs because highly-identified group members are motivated to protect the ingroup by setting a strict threshold for admittance, then one would expect that the magnitude of the IOE should increase when intergroup threat is salient or heightened. This might occur for a variety of reasons. First, if one’s group is threatened, it should be especially important to ensure that the group is strong and of its highest quality during that threatening time so it can effectively ward off the danger. Though allowing more individuals into the ingroup would increase its size, if those individuals are of “low quality,” they may hurt the ability of the group to defend itself. Another reason why intergroup threat might augment the IOE is because doing so will prevent the “enemy” from infiltrating the ingroup and attacking it “from the inside.” By definition, if one makes a mistaken ingroup categorization, this means that he or she has allowed an outgroup member into the ingroup. To the extent that intergroup threat is

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1 The cautious way that highly-identified individuals make group categorization decisions is remarkably similar to how racially-prejudiced individuals make these same categorizations. Blascovich and colleagues (1997) demonstrated this by having participants racially categorize ambiguous and unambiguous white and black faces. They found that highly-prejudiced respondents took longer than their non-prejudiced counterparts to make race-categorization decisions when faces were ambiguous. They concluded that participants who are highly prejudiced believe that misidentifying a racial outgroup member as an ingroup member would “contaminate” their own group, an analogous threat perceived by high identifiers when making ingroup-outgroup decisions.
operating, this outgroup member may wish harm to the ingroup and could inflict such harm once inside. The importance of such threats is highlighted in realistic conflict theory, which posits that group conflict, prejudice, and discrimination are due to conflict over limited resources (Levine & Campbell, 1972; Sherif, 1966). Thus, for one or both of these reasons, one might be more ingroup exclusive under conditions of intergroup threat. Castano and colleagues (2002) themselves speculated about the importance of considering such intergroup contextual circumstances when they noted, “factors involving the relations between the ingroup and specific outgroups… may also strengthen or weaken the ingroup overexclusion effect. The mediating variable is the importance attached to defending the ingroup, which is likely to vary according to these contextual changes” (p 320).

The notion that threat might enhance the proclivity to exclude targets from the ingroup has already received some direct empirical investigation. Namely, Castano (2004) investigated the effect of mortality salience (a threat to the self) on the IOE. In that work, Scottish participants were primed with a threat word (death) or a neutral world (field), and then were shown 30 faces (that varied in how much they resembled the ingroup) and were asked to identify each as Scottish or English. Results found that, overall, Scottish participants tended to categorize more faces as outgroup members (English nationals) than ingroup members, another example of the IOE. But in addition, the threat to the self exacerbated the IOE. Individuals primed with “death” (in the self threat/mortality salience condition) were more likely to exclude individuals who resembled outgroup members from the ingroup than were those primed with “field.” Thus, these findings suggest that experiencing a threat to the self might enhance the IOE. In the following studies, I will investigate if an intergroup threat might do so as well.

In my first study, I will subtly induce intergroup threat via a manipulation of the nature of the categorization task. Though the IOE has been shown using numerous methodologies across several studies, the nature of the categorization task used has remained relatively constant. In most experiments showing the IOE to date, perceivers were asked to categorize a target as either an ingroup member or a member of a specific outgroup (e.g., Northern vs. Southern Italian; but see Yzerbyt et al., 1995 for an exception). Under these circumstances, the IOE appears to be a rather robust finding. Yet, pilot studies in our lab suggest that asking the question in a slightly different way reduces and perhaps even eliminates the IOE. Specifically, when perceivers categorize a target as an ingroup member or not an ingroup member, the IOE is reduced.
Claypool, Hugenberg, Housley, Bernstein and Mackie (Experiments 1 and 3, under revision) asked participants to decide whether targets were Miami students (members of the ingroup) or not. If an ingroup overexclusion effect were occurring, one would expect fewer than half the categorizations to be of Miami students. Yet, neither study found this. However, in their Experiment 2, participants performed the same procedure but had to identify whether a target was a Miami student or a Marshall student (a particular outgroup). This format of the categorization task replicates the one used by Leyens and Yzerbyt (1992) as well as Castano and colleagues (2002) in their numerous investigations of the IOE. When Marshall was used as a specific outgroup, the ingroup overexclusion effect did occur, such that more faces were labeled as outgroup members than ingroup members. Thus, it appears that the mention of an outgroup in the categorization task causes participants to be more cautious when decisions are made (leading to the typical IOE), but the absence of a specific outgroup in the categorization task fails to elicit the IOE.

Importantly, the Claypool et al. (under revision) studies were not directly interested in investigating the IOE, nor whether the nature of the categorization task was a moderator of it. They did not measure group identification, nor did they manipulate the nature of the categorization task within the same experiment. Thus, my interest in Study 1 is to directly examine whether the IOE is moderated by the nature of the categorization task, and if so, if this is because the mention of a specific outgroup in the categorization question increases perceptions of intergroup threat.

In Study 2, I will manipulate threat more directly via explicit instructions. These instructions will communicate to participants that the outgroup poses a direct threat to the ingroup, does not pose a threat to the ingroup, or no threat information will be provided. Again, I hypothesize that under conditions where intergroup threat is heightened that the IOE will occur most strongly. Additionally, this study will allow me to examine whether a reduction in intergroup threat might decrease the size of the IOE.

\[\text{In Yzerbyt et al. (1995), only one group was used in the categorization decision. Some participants were asked if the speaker was Flemish, whereas others were asked if the speaker was Walloon (thus individuals saw either an ingroup or an outgroup name in the categorization question, but not both at the same time).}\]
Study 1 Method

Participants

Thirty one (29 female) Miami undergraduates enrolled in introductory psychology courses participated in this experiment for partial fulfillment of a course requirement. All participants completed two sessions: one at the beginning of the semester as part of mass testing, where their identification to Miami University (the ingroup) was measured, and a second where they completed the main experimental tasks.

Materials

Thirty-six color photographs of male Caucasians displaying neutral facial expressions were used. All of the individuals were pictured from roughly the chest up against a common background.

Procedure

Session one. During a mass-testing session at the beginning of the semester, students completed a packet of surveys from multiple researchers. Included in this packet was the Collective Self-Esteem Scale (CSES), a measure with multiple subscales, one of which assesses group identification (Luhtanen & Crocker, 1992). This sub-scale includes items like “Overall, the Miami University Student group has very little to do with how I feel about myself,” and “The Miami University School group is an important reflection of who I am.” Participants responded to these statements using a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Participants who scored in the lower and upper third of the distribution were classified as low and high in group identification, respectively, and were later contacted to participate in the experimental study.

Session two. Participants arrived at the experimental location and were seated in front of a computer screen and asked to follow the provided directions. These directions explained that
their first task would involve viewing a number of faces, one at a time, and making a decision about each face. Intergroup threat was manipulated by the type of decision participants were asked to render. In the specific outgroup (SO) condition, which I hypothesized would induce intergroup threat, participants were informed that some of the faces they would see were of Miami University students (i.e., were ingroup members) whereas others were of Marshall University students (i.e., were outgroup members). To ensure that participants would identify Marshall University as a relevant outgroup, these participants were explicitly told that Marshall was another university that often competes with Miami in both scholastic and athletic arenas. Participants were then asked to examine each face and categorize it as either a Miami student or a Marshall student. Those in the no specific outgroup (NSO) condition, which I hypothesized would induce low levels of intergroup threat, received different instructions. Namely, they were told that the faces they would see were those of Miami University students or not. Again, participants’ task was simply to examine each face and categorize it accordingly.

After reading these instructions, participants were shown 36 photographs and asked to render forced-choice categorizations of them as Miami/Marshall students or as Miami students/not Miami students. The photos were presented in a different random order for each participant, and each photo remained on the screen until a decision was made. Both the decision rendered and the latency to make the decision were recorded.

Following the categorization task, participants completed a lexical decision task designed to measure the accessibility of concepts associated with group threat. The task consisted of 84 trials in which participants were presented with letter strings on the computer screen. Forty-two of the letter strings formed actual words, whereas the other 42 formed pronounceable non-words (e.g., tibdi). The 42 actual words were subdivided into three target groups consisting of 14 words each. One group consisted of words related to concepts of intergroup threat (e.g., combat, battle, war, conflict; see appendix for the complete list). A second group consisted of words that were negative in valence, but unrelated to intergroup threat (e.g., spider, cockroach, swamp, ill, sick), and the third group consisted of neutral words that were neither negative nor related to intergroup threat (e.g., grass, park, walk). Words in each group and the non-words were matched for length. The order of the presentation of these 84 lexical decision trials was randomized for each participant.
On each trial, participants were asked to direct their gaze at a fixation point (+) that appeared for 1 second in the center of the computer screen. Once the fixation point disappeared, a letter string appeared at the same location, and participants decided as quickly and accurately as possible whether the letter string was a word or not. Participants’ decisions were rendered by pressing either a ‘‘word’’ button (the ‘‘f’’ key) or a ‘‘non-word’’ button (the ‘‘j’’ key). Each letter string remained on the screen until the participant responded. After completing the lexical decision task, participants answered some demographic questions, were probed for suspicion, debriefed, thanked, and dismissed.

Study 1 Results

*Categorization decisions*

I hypothesized that threat, induced via question type, would enhance the ingroup overexclusion effect. Specifically, I predicted that the IOE would be larger in the threat (specific outgroup, SO) condition than in the low-threat (no specific outgroup, NSO) condition. This hypothesis would be supported by the presence of an interaction between ingroup identification and threat, such that in the threat (SO) condition, high identifiers should categorize fewer targets as ingroup members than should low identifiers, but this effect would be reduced or eliminated in the low-threat (NSO) condition. This hypothesis was tested using a 2 (Identification: low, high) × 2 (Question Type: specific outgroup, no specific outgroup) between-subjects ANOVA on the number of targets categorized as ingroup members. As shown in Figure 1, the hypothesized interaction did not emerge, \( F(3, 27) = 0.31, p > .50 \). Instead, the analysis revealed a main effect of question type, \( F(3.27) = 6.78, p = .02 \), showing that more targets were categorized as ingroup members in the low-threat (NSO) condition (\( M = 21.41, SD = 1.07 \)) than in the high-threat (SO) condition (\( M = 17.48, SD = 1.07 \)). Follow-up analyses showed that those in the low-threat condition categorized more than half (18) of the targets in the ingroup, \( t(14) = 2.53, p = .02 \). This suggests that those in the low-threat (NSO) condition were clearly not engaging in ingroup overexclusion and, in fact, were rather ingroup inclusive. The number of ingroup categorizations of those in the high-threat (SO) condition, on the other hand, did not differ from half, \( t(15) = -0.63, p > .50 \).
Categorization latencies

As discussed earlier, Castano and colleagues (2002) found that high identifiers were faster to reject a target as an outgroup member than to accept a target as an ingroup member; whereas low identifiers were equally fast in rejecting an outgroup member and accepting an ingroup member. Castano and colleagues argued that a shorter latency to reject an outgroup member than accept an ingroup member indicates a desire to protect the ingroup; a desire high identifiers evidenced that low identifiers did not. I hypothesized that I would observe this same pattern of findings in the high-threat (SO) condition, as it parallels the Castano and colleagues’ (2002) methodology. I further hypothesized that this pattern would be less pronounced, or even eliminated, in the low-threat (NSO) condition.

To test these hypotheses, I created two average latency scores for each participant. One represented average decision speed on trials when the participant accepted the target as an ingroup member, and the other represented average decision speed on trials when the participant rejected the target as an ingroup member (i.e., classified the target as an outgroup member). According to Castano and colleagues (2002), longer reaction times to accept versus reject a target as an ingroup member reflects a protective desire. As such, I calculated a difference score by subtracting the average response times for rendering outgroup decisions from the average response times for rendering ingroup decisions so that a positive difference score indicates a greater ingroup protective desire.

A 2 (Question Type: specific outgroup, no specific outgroup) x 2 (Identification: low, high) between-subjects ANOVA was performed to analyze these difference scores. As seen in Figure 2, the predicted interaction did not emerge, $F(1,27) = 0.37, p > .50$. The analysis did reveal, however, a main effect of question type, opposite of what would be expected, $F(1,27) = 4.24, p = .05$. Specifically, participants in the low-threat (NSO) condition ($M = 50.15, SD = 119.69$) showed a larger latency difference score than did those in the high-threat (SO) condition ($M = -298.16, SD = 119.42$). According to Castano and colleagues (2002), this means that those in the low-threat condition showed a greater desire to protect the ingroup than did those in the high-threat condition. Additionally, the analysis revealed a marginal main effect of identification that supports Castano and colleagues’ assertion that high identifiers ($M = 25.23, SD = 113.94$)
have a greater desire to protect the ingroup than do low identifiers \((M = -273.25, SD = 124.89),\) \(F(1,27) = 3.17, p = .09,\) as the former group had a larger latency difference score.

**Mediation using group categorization latencies**

As reported earlier, threat (question type) had a significant effect on the number of targets categorized as ingroup members. I hypothesized that this effect emerged because mentioning a rival outgroup in the categorization decision might have increased a sense of intergroup threat, which in turn, would affect participants’ willingness to allow targets into the ingroup. In other words, I hypothesized that perceived threat would mediate the observed relation between question type and the number of faces categorized as ingroup members. Intergroup threat was measured in two ways in my study, and thus, two sets of mediational analyses were performed.

First, I sought to determine if the measure developed by Castano and colleagues (2002) would act as a mediator. Though they characterized this measure as tapping a “desire to protect the ingroup,” one might just as easily characterize this as a threat response. Regardless of how this measure is labeled, it might logically mediate the relation between question type and ingroup categorization tendencies.

Following the Baron and Kenny (1986) method for establishing mediation, I first dummy-coded the predictor variable, question type (0 = NSO, low threat; 1 = SO, high threat), and regressed the outcome variable (number of ingroup categorizations) on it. Not surprisingly, given the results of the ANOVA reported earlier, there was a significant relation, such that fewer targets were categorized as ingroup members in the SO (high-threat) condition than in the NSO (low-threat) condition, \(\beta(29) = -3.77, p = .02.\) Next, I regressed the potential mediator, the latency difference score between latencies to make ingroup and outgroup categorizations, on question type. Consistent with the counterintuitive findings from the previously reported ANOVA, there was a marginally significant relation, such that there was a larger difference score in the NSO (low-threat) than in the SO (high-threat) condition, \(\beta(29) = -291.58, p = .098.\) Thus, if mediation were to occur, it would not follow the process I hypothesized. That is, it appears that mentioning the rival outgroup in the categorization task decreased threat, at least as defined by the Castano and colleagues’ (2002) measure. Next, I regressed the number of ingroup categorizations on the latency difference score. This outcome was non-significant, \(\beta(29) = -0.0011, p > .50,\) and thus
responses on this difference score could not have acted as a mediator of the relation between question type (threat) and the number of targets categorized as ingroup members.

Mediation using lexical decision latencies

The second threat measure I investigated as a possible mediator between question type and the number of targets categorized as ingroup members was the reaction times to intergroup threat-related words in the lexical decision task. Average latencies were calculated for each participant for the group-threat words. Reaction times on trials where participants made lexical-decision errors were not included in the averages. Additionally, reaction times shorter than 300ms and faster than 3000ms were removed from analyses. If the main effect of question type (threat) on ingroup categorization is mediated by threat, then there would need to be an effect of question type (threat) on accessibility of intergroup-threat words. However, no such effect was found, $\beta(29) = -19.34, p > .60$. Since question type did not affect this measure, it cannot be acting as a mediator.

I then performed a similar analysis using the difference between the mean reaction times to group-related-threat words and neutral words. Because neutral words should act as a baseline word-recognition measure, subtracting the reaction times to neutral words from the reaction times for threat words will decrease the amount of variance in the data and thus might yield a better, more sensitive measure. Using this difference score as the potential mediator, however, was not effective, as there was no relation between it and question type, $\beta(29) = 10.25, p > .75$. Thus once again, because question type did not affect this threat measure, it cannot mediate the relationship between question type and ingroup categorization.

Study 1 Discussion

I hypothesized that the IOE might occur only or predominately under conditions of intergroup threat, which I attempted to induce by manipulating whether a specific outgroup was or was not present in the categorization question. More specifically, using Castano and colleagues’ (2002) definition of the IOE, I predicted that high identifiers would categorize fewer targets as ingroup members than would low identifiers, but this would be true primarily in the
specific outgroup (high-threat) condition. My results, however, did not indicate such an effect, as there was no interaction between group identification and question type (threat) on the number of targets categorized as ingroup members.

My results did show, however, a main effect of question type: in the low-threat condition, when the specific outgroup was not mentioned, more faces were categorized as ingroup members than in the high-threat condition when a rival outgroup was mentioned. Though this effect was not moderated by identification, one might still consider this finding consistent with the hypothesis that intergroup threat increases the IOE. However, this finding is only partially supportive, as people in the high-threat condition actually did not exhibit a “true” ingroup overexclusion effect because they labeled half of the targets as ingroup members and thus were not overexcluding. Ideally, I would have observed a “true” IOE in the high-threat condition (with fewer than half of the targets labeled as ingroup members) and either no IOE (half the targets being labeled as ingroup members) or an ingroup overinclusion effect (with more than half of the targets labeled as ingroup members) in the low-threat condition. Unfortunately, this was not the pattern obtained.

I further hypothesized that if the magnitude of the IOE was altered by question type that it would have occurred because the mention of a rival outgroup in the question raised perceptions of intergroup threat. I measured this sense of threat in two different ways. The first assessed the accessibility of intergroup-threat-related words in a lexical decision task. Unfortunately, question type (the purported threat manipulation) did not affect these response latencies. A second measure of intergroup threat was derived from Castano and colleagues (2002) who argued that the resulting difference score obtained from subtracting the average latency to categorize targets as outgroup members from the average latency to categorize targets as ingroup members represents a wish to protect the ingroup from threatening, undesirable members. Using this measure also failed to show that including a rival outgroup in the question raised perceptions of threat. In fact, my results showed the opposite pattern: that perceptions of threat were lower following categorization decisions that involved (versus did not involve) mention of an outgroup. Given the null and counter-intuitive findings on these threat measures, it was not surprising that neither acted as a mediator between question type and number of targets categorized as ingroup members. Thus, overall, these findings suggest that (a) my manipulation of question type failed
to manipulate threat, or (b) that these particular measures of threat were not properly sensitive enough or constructed well enough to detect this threat.

Though null or counter-prediction findings can occur for a variety of reasons (e.g., the predictions were wrong, the measures were poorly constructed, there were idiosyncratic problems with my participants, etc.), one of the most obvious reasons why the threat manipulation may have failed was because it was too subtle. Therefore, the next study attempted to investigate if the magnitude of the IOE can be altered via a threat manipulation, but this time, the manipulation will be more overt and blatant. Perhaps under these conditions I will be able to show that increased intergroup threat augments the size of the IOE and that this effect is mediated by one of the threat measures. Additionally, this study will employ a low (non-) threat condition to determine if the presentation of a rival outgroup as seemingly innocuous can reduce or even eliminate the magnitude of the IOE compared to a control condition, in which no threat information is offered.

Study 2 Overview

In Study 1, I tried to manipulate intergroup threat by including or not including a specific outgroup in the categorization question. In this second study, I tried to induce intergroup threat more directly, by giving differing information to participants about a specific rival outgroup. This information was added prior to the categorization task and was designed to either heighten or lessen the perceived threat of the specific outgroup to the ingroup. Relative to a control condition, in which little information was provided about the outgroup, I predicted an exacerbation of the IOE in the heightened threat condition and a reduction of the IOE in the decreased threat condition. The Castano and colleagues’ (2002) “group protection” (threat) measure as well as the accessibility of intergroup threat-related words were collected so that I could test whether perceived threat acted as a mediator of the predicted relation between the threat manipulation and the magnitude of the IOE.
Study 2 Method

Participants

Seventy-five (52 female) Miami undergraduates enrolled in introductory psychology courses participated in this experiment for partial fulfillment of a course requirement.

Procedure

Participants arrived at the experimental location and were seated in front of computer screens and asked to follow the provided directions. These directions explained that the study concerns how we categorize ourselves, words, and others. Participants were then informed that their first task would involve reporting on their preferences and personality. To do this, participants responded to 40 filler questions taken from the Big Five Personality Test (Goldberg, 1993; Oliver & Srivastava, 1999). These questions asked participants to rate themselves on a series of questions such as the degree to which they feel comfortable in a crowd, enjoy spending time with other people, enjoy planning, etc. Randomly embedded among these items were the four questions that comprise the identification subscale of the CSES, which were included to assess Miami University identification. All responses were recorded on 7-point Likert scales, with higher values indicating greater agreement. Assessment of Miami identification was collected in this manner to obscure its connection to the upcoming tasks.

After completing these items, participants were told they would be performing two additional tasks. The first would involve word categorization, and the second would involve person categorization. Next, participants were told that the person categorization task would require them to categorize people as Miami or Marshall University students. At this point, participants were given information about Marshall University, which served as the manipulation of threat. In the heightened threat condition, participants read the following:

Marshall University is a direct regional competitor of Miami University. Miami University and Marshall University routinely compete for regional and federal funding in all areas of academics, including federal aid for facilities and professors, future growth funding, and even student scholarships. Due to Marshall University’s significant growth
over the past few years in student admissions, Marshall is expected to surpass Miami’s whole monetary endowment within 3 years. Further, the two schools are major competitors in athletic areas as well, having a long-running rivalry in football and several other sports. Marshall Students perform as well or better in many cases on standardized tests and overall GPA than do Miami students. Finally, students at Marshall say they enjoy the social life and “party atmosphere” at Marshall, and a recent comparative survey suggests students there enjoy college more than do students at Miami.

Participants in the decreased threat condition read the following:

Though some schools do in fact compete with Miami University, Marshall University is not one of them. Miami University and Marshall University do not compete for regional and federal funding in any areas of academics, federal aid for facilities or professors, future growth funding, or student scholarships. Marshall University’s lack of growth over the past few years in student admissions has kept them out of Miami’s bracket for funding. Marshall’s whole monetary endowment is significantly less than Miami’s. Miami routinely defeats Marshall University teams in several sports. Students at Miami perform as well or better in many cases on standardized tests and overall GPA than those students at Marshall. Finally, students at Miami say they enjoy the social life and “party atmosphere” at Miami, and a recent comparative survey suggests students here enjoy college more than do students at Marshall.

Participants in the control condition read:

Marshall University is a school located in West Virginia with a student population of roughly 14,000.

After reading this information about Marshall University, students participated in the “word categorization task,” which was identical to the lexical decision task used in Study 1. This measure allowed for assessment of perceived intergroup threat.

Once they completed the lexical decision task, participants were given the same instructions and procedure for the ingroup categorization task used in Study 1. That is, they were shown 36 photos and asked to categorize each as either a Miami or Marshall University student.
Once completed, participants answered some demographic questions, were probed for suspicion, were debriefed, thanked, and dismissed.\(^3\)

**Study 2 Results**

*Categorization decisions*

I hypothesized that the degree of perceived threat, as manipulated by the paragraphs describing Marshall University, would moderate the effect of identification on the number of targets categorized as ingroup members. Specifically, I hypothesized that, relative to the control condition, the IOE would be augmented in the heightened threat condition and mitigated in the decreased threat condition. I conducted a \(2\) (Identification: low, high) \(\times 3\) (Perceived Threat: control, increased threat, decreased threat) between-subjects ANOVA on the number of targets categorized as ingroup members to test this hypothesis.\(^4\) As shown in Figure 3, the predicted interaction did not emerge, \(F(2,69) = 0.66, p = .52\). Further, the main effect of identification was not significant, \(F(1,69) = 0.60, p = .44\), nor was the main effect of perceived threat, \(F(2,69) = 0.12, p = .88\). Additionally, follow-up analyses were conducted to determine if the mean number of targets differed from chance levels (18 targets) in any of the conditions, but none did. Moreover, a final analysis was conducted to determine if the IOE was produced at all, collapsing over all conditions. It showed that the average number of faces categorized as ingroup members by all participants \((M = 17.25, SD = 4.13)\) did not differ from chance, \(t(75) = -1.566, p = .122\). Thus unfortunately, by any definition, I failed to elicit the ingroup overexclusion effect.

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\(^3\) One of the demographic questions concerned whether participants had seen, “We are Marshall”, a movie that came out in theaters shortly before this study was conducted. Removing those participants who had seen the film from the analyses did not affect the results, and thus all of the reported findings include those participants.

\(^4\) Identification was treated as a categorical variable with those scoring below 4 (the median) categorized as “low identifiers” and those scoring at or above 4 being categorized as “high identifiers”. When identification was treated in other manners (continuous, upper and lower thirds, upper and lower quartiles), the results did not differ.
Categorization latencies

As in Study 1, I next investigated whether perceived threat or identification would influence the speed with which participants rejected targets as outgroup members versus accepted targets as ingroup members. I performed a 2 (Identification: low, high) x 3 (Perceived Threat: control, increased threat, decreased threat) between-subjects ANOVA on the same latency difference score used in Study 1, created by subtracting the average latency score for making outgroup categorizations from the average latency score for making ingroup categorizations. As seen in Figure 4, there were no significant effects, all \( p > .16 \). Thus as in Study 1, I was unable to replicate the Castano et al. (2002) finding on this measure. Regardless of group identification or perceived threat, latencies for categorizations did not differ.

Lexical decision latencies

Though the reaction times to intergroup-threat words in the lexical decision task cannot act as a mediator of the relation between perceived threat and ingroup categorization tendencies, because no such relation was found, I nevertheless performed an analysis of these scores to investigate the efficacy of the threat manipulation. If the threat manipulation worked as planned, then participants should have been faster to respond to threat-related words when in the heightened-threat condition and slower to respond to these words in the decreased-threat condition, as compared to the control. I conducted a 2 (Identification: low, high) x 3 (Perceived Threat: control, increased threat, decreased threat) between-subjects ANOVA on reaction times to group related threat words, but found no significant effects, all \( p > .64 \). Thus reaction times to threat-related words were not faster for those who read the threatening paragraph (\( M = 697.04, SD = 24.28 \)) or slower for those who read the non-threatening paragraph (\( M = 700.48, SD = 23.33 \)) compared to the control condition (\( M = 723.71, SD = 23.48 \)). To reduce variability in these scores and perhaps create a more sensitive measure, I calculated a difference score by subtracting the reaction times to neutral words from the reaction times to intergroup-threat words. However, a 2 (Identification: low, high) x 3 (Perceived Threat: control, increased threat, decreased threat) between-subjects ANOVA on this measure also failed to yield any significant effects, all \( p > .23 \). The null findings on these latency scores suggest that the manipulation was
not effective at inducing threat or that the measure was not properly constructed to detect the threat produced.

Study 2 Discussion

In Study 2, I tried to further examine my original hypothesis that the ingroup overexclusion effect can be moderated by perceived intergroup threat. Whether one uses the original definition of the IOE, as occurring when perceivers place a majority of targets in the outgroup, or the Castano et al. (2002) definition, whereby this pattern occurs for high identifiers only, my manipulation failed to show that threat moderates the IOE. This failure occurred despite the fact that I manipulated perceived intergroup threat via a fairly blatant method, in which participants read different paragraphs describing Marshall University (the outgroup) as posing a direct threat to Miami University (the ingroup) or no direct threat. Analysis of response times to the intergroup-threat words in the lexical decision task suggests that, despite its degree of face validity, the threat manipulation may have failed, which could, in part, explain the null findings.

General Discussion

The ingroup overexclusion effect describes the tendency for people to categorize more targets as outgroup members than as ingroup members (e.g., Leyens & Yzerbyt, 1992; Castano, 2004; Castano et al., 2002). This phenomenon has been shown to be moderated by identification, such that the effect occurs almost exclusively for high identifiers (Castano et al., 2002). I hypothesized that perceivers’ tendency to place more targets in the outgroup than the ingroup would be magnified by manipulations of intergroup threat. Scholars in this area have suggested that the desire to exclude targets from the ingroup stems from a wish to protect the ingroup from potentially negative others. If negative individuals are allowed into the group, the overall status and quality of the group could diminish, which could affect the esteem one can glean from membership in it. Thus, it seemed quite plausible that when a perceiver is feeling threatened, that this might heighten a self/group protective desire, which would lead to even more ingroup overexclusion. To the extent that it is primarily those who strongly identify with the group who
have this protective desire, the effect of threat on ingroup exclusion might only be seen for those individuals.

Though the basis of these hypotheses seemed sound, results of both studies failed to garner much support for them. Neither the subtle (Study 1) nor the blatant (Study 2) threat manipulation produced the hypothesized findings. The finding that came closest to supporting the notion that threat would increase the magnitude of the IOE came in Study 1, where results revealed that including the name of a rival outgroup in the categorization question decreased the number of targets categorized in the ingroup, relative to a condition where this rival group was not mentioned. This finding was not ideal, in that neither group showed a “true” IOE as neither categorized a statistical majority of targets in the outgroup. Nevertheless, the fact that including a rival outgroup’s name in the categorization question makes participants more cautious in making ingroup categorization decisions is interesting and warrants follow-up investigations to understand.

**Study shortcomings**

Overall, there are two glaring problems with the findings of this research. First, I was unable to produce the IOE in any form. That is, I did not find evidence that perceivers categorize more targets in the outgroup than in the ingroup in any condition in either study. Additionally, even if I could not produce a “true” IOE, I still would have expected high identifiers to categorize fewer targets in the ingroup than would low identifiers (as found by Castano et al., 2002). However, the only condition in which this pattern emerged was the decreased-threat condition of Study 2. But even here, the difference between low and high identifiers was not significant ($p > 0.60$). The second problem is that the threat manipulations appear to have failed. I will discuss possible reasons for both of these problems next.

Regarding the failure to find the IOE, there are some important differences between these studies and others in this literature which might help explain the null findings. The first important methodological difference concerns the nature of the stimuli used. In many of the published studies that found the IOE, the researchers used profiles or other behavioral information to describe the targets (Leyens & Yzerbyt, 1992; Yzerbyt et al., 1995). In contrast, in
the studies reported here, the information about targets was conveyed via photos only, and no other information about them was provided.

Another noteworthy difference between my studies and those in the IOE literature is that I used a school group distinction instead of a national group or ethnic group distinction, which is what has been used in most IOE studies. Though we have successfully produced an IOE in our lab using the Miami-Marshall distinction in the past (e.g., Claypool et al., under revision), perhaps there is something about this particular dimension that makes the IOE less reliable or the effect size smaller than when national or ethnic groups are used. After all, school rivals are likely not perceived as very threatening. Though school rivals might be feared in sports contexts, such groups have few other means by which to harm the ingroup and likely are not perceived as trying to infiltrate it. National outgroups, though, could harm the ingroup by immigrating into the ingroup’s home country and taking its jobs and other economic resources. Or, in the most extreme case, the national outgroup might declare war on the ingroup nation and invade it in a violent attack. And ethnic outgroups too are often perceived as being in competition for economic and political power with the ingroup. Therefore, a better approach might have been to use an outgroup for which the perceived threat was strong and for which an infiltration fear was plausible.

Additionally, if one defines the IOE as the tendency for high identifiers to categorize fewer targets in the ingroup than do low identifiers, my study failed to produce the IOE by this definition as well. It is important to note, however, that there has been only one published study showing identification as a moderator of the ingroup overexclusion effect. Though Castano and colleagues’ (2002) work is clear, and though there is strong support from the literature to suggest that group identification should act as a moderator, results in our laboratory have been mixed at best. Specifically, counting the two studies reported here, we have conducted ten studies in our lab looking for evidence that ingroup identification moderates the IOE. Of these, only three have found this effect. Thus, perhaps the moderating effect of identification on the IOE is a small one.

In addition to failing to find an IOE, the second major problem is that the threat manipulations appear to have failed. The failure of the threat manipulation in Study 1 to affect the threat manipulation-check measures perhaps is not overly surprising, given its subtleness. But the threat manipulation in Study 2 was quite blatant and, at a minimum, should have produced differential accessibility of threat-related words on the lexical decision task. A definitive
explanation for this failure is difficult to generate. Perhaps the paragraph descriptions of Marshall were not believable or perhaps Marshall is simply not seen as a fierce enough outgroup competitor for the threat to be legitimately felt. Or, perhaps the threat manipulation worked, but the LDT did not capture its effectiveness.

It is important to note that an LDT measures accessibility, not perceptions, and close inspection of the paragraphs suggests that both the low- and high-threat paragraphs mention threat-related words multiple times. Specifically, both mention words like “compete,” “competitor,” and “defeat.” Thus, ironically, threat accessibility could have been equally high in the low-threat and high-threat conditions, leading to equivalent responses on the LDT. And though not significant, the pattern of means supports this assertion; namely, responses to threat-related words were faster in both the low- and high-threat conditions compared to the control condition, which contained no threat-related words at all. Perhaps more explicit measures of perceived threat, ones that do not simply tap accessibility or recent activation, would have verified the effectiveness of the manipulation.

Given the overall pattern of findings across these two studies, I am unfortunately unable to make any firm conclusions regarding my original hypothesis that intergroup threat increases the magnitude of the IOE. It may be that the hypothesis is untrue, but because the threat manipulation checks failed, it is also possible that my manipulation simply did not produce the adequate threat conditions under which to test this hypothesis. This is not likely the entire story, however, as I failed to produce a basic IOE in any conditions of these studies, which suggests that something else about my particular methodology or participants created problems.

Future Directions

Though the current findings were not encouraging, I still believe that the foundation for the hypotheses is sound. If I were to attempt to test these hypotheses again in the future, there are a number of changes I would make that I hope would increase the chances of obtaining the predicted results.

First, I need to confirm that my threat manipulation is effective by performing pilot studies. As mentioned previously, perhaps a better way to verify the effectiveness of the manipulation is via explicit measures rather than an LDT. Participants could simply rate how
threatening the descriptions seem or how threatened/fearful they would make Miami students feel. Given the obvious face validity of the threat descriptions, I would be very surprised if they were not perceived as differentially threatening.

Assuming that the pilot work confirms that the threat manipulation is effective, I would run Study 2 again, but this time, I would remove the LDT threat measure altogether. This way, participants would read the threat manipulation and then immediately complete the main dependent measure. Perhaps one reason why the threat manipulation in Study 2 failed to produce any movement on the number of targets categorized as ingroup members was because too much time elapsed between experiencing threat and when they rendered their ingroup-outgroup judgments.

Also, I should use photos that I pre-test for their perceived resemblance to the typical Miami and Marshall students. If the particular photos I used had a strong resemblance to Miami students, finding an IOE might be very difficult with such stimuli. In the future, I should be sure to use photos that appear ambiguous, as such stimuli provide the best circumstance for finding the IOE (Castano et al., 2002).

If the previously described study did in fact show that increased threat augments the magnitude of the IOE, then other interesting theoretical avenues could be pursued. Within the social-cognitive literature, research employing the minimal group paradigm has shown strong cognitive, motivational, and behavioral differences for ingroup and outgroup targets based on relatively arbitrarily constructed groups (e.g., DeSteno, Dasgupta, Bartlett, & Cajdric, 2004; Tajfel et al., 1971). It would be fascinating to determine if perceivers would show an IOE even for an arbitrary, newly-formed group. And if an IOE is possible under these circumstances, I would next investigate if perceived threats to that minimal group would exacerbate the effect.

More broadly, scholars should investigate other potential moderators of the IOE. One moderator might be causal uncertainty. Causal uncertainty is an aversive state that individuals routinely encounter in their lives in which they feel as though they are inadequate at identifying causal relationships in the world (Weary & Edwards, 1994; 1996). One function of affiliating with groups is to reduce uncertainty. Identification to a group can buffer uncertainty about the self, specifically because it guides behavior and beliefs, informs individuals as to how they should view themselves and others, and gives insight into how others should view and treat them (Hogg & Grieve, 1999; Hogg et al., 2007). Though the very nature of the categorization task in
which participants engage is somewhat uncertain, perhaps a manipulation of uncertainty would lead to moderation of ingroup inclusiveness. Putting people into an uncertain state might result in their being more willing to identify with the salient ingroup and thus might result in more exclusion of others presented as possible targets. However, a competing hypothesis exists. People who are uncertain may wish to identify with a group and thus don’t want to oust potential group members with whom they may be able to further affiliate. Both possibilities are interesting and should be investigated further.

Conclusion

Though I had little success in finding the ingroup overexclusion effect or a moderator of it, the phenomenon still remains an important one to study because of its obvious relevance to intergroup relations. Identifying the mechanisms that explain why people tend to overexclude individuals from the ingroup and identifying strategies for how to make individuals more inclusive are both important goals to better intergroup relations. Given how many benefits are bestowed upon members of the ingroup, research that uncovers circumstances that can make the boundaries of groups more porous will have an important impact on both basic theory and applied research in the domain of group prejudice, discrimination, and group conflict.
Figure 1. Total number of faces categorized as ingroup members as a function of identification and question type (threat).
Figure 2. Ingroup – outgroup categorization latencies as a function of question type and identification. Higher scores indicate a greater desire to protect the ingroup.
Figure 3. Total number of faces categorized as ingroup members as a function of identification and perceived threat.
Figure 4. Ingroup – outgroup categorization latencies as a function of perceived threat and identification. Higher scores indicate a greater desire to protect the ingroup.
Appendix

Neutral Words:
walk
chair
bird
hat
fruit
ribbon
hallow
track
path
distant
floor
grass
light
paint

Non Words:
Non Words:

Negative Non-Intergroup Threat Words:
rat
dire
bug
swamp
cockroach
cruel
rotten
mold
gross
nasty
dirt
ill
sick
bad

Non Words:
Non Words:

Intergroup Related Threat Words:
hate
fight
fear
war
enemy
rival
battle
combat
foe
menace
conflict
threat
compete
bully

Non Words:
Non Words:
References


