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Exploring Implicit Partisanship: Enigmatic (But Genuine) Group Identification and Attraction

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Briefly studying names of four members of a hypothetical group produces identification with and attraction to that group, a finding labeled *implicit partisanship* (IP; Greenwald, Pickrell, & Farnham, 2002). The original demonstration of IP used human groups in a competitive context. Experiments 1 and 2 varied these procedures by using, respectively, a cooperative intergroup context and non-human group members (fictitious car brands). Neither of these variations eliminated the IP effect, indicating unanticipated robustness. Experiment 3 revealed a substantial reduction of the IP effect's magnitude when the studied names represented a rival university. The reduction of IP through identity opposition supports the interpretation that spontaneous group identification effects carry psychological significance that is comparable to that of more ordinary group identifications.

KEYWORDS group attraction, group identification, Implicit Association Test, implicit partisanship

> *Please take a minute to memorize the following names representing the Purple team: Glenda, Laurel, Milton, and Alfred.* (Adapted from experiment instructions; Greenwald, Pickrell, & Farnham, 2002)

In the process of learning the four names is it possible that you unthinkingly classified yourself as the newest member of the Purple team? Though seemingly unlikely, this is just what Greenwald et al. (2002) suggested may have occurred. Labeling the phenomenon *implicit partisanship*, they concluded that people (a) spontaneously identify with and (b) form positive attitudes toward groups that they know only in this minimal fashion. The present research sought further understanding of this phenomenon.

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A method for producing spontaneous group attachment and preference

In a series of studies, Greenwald et al. (2002) asked participants to imagine that a small number of students, divided into two teams, met each week to participate in a vocabulary game competition. The participants then spent 45 seconds studying the names of four members of one of the two teams (*Purple* or *Gold*). The purpose of this study was explained as serving to help in the next task of learning to recognize who was on each team. The 45-second study period was followed by a categorization task in which participants practiced classifying the four studied names and the four names of the members of the remaining group with their respective (*Purple* and *Gold*) team identities. Across three studies, and on implicit measures that did not require participants to describe the effects by self-report, this minimal study procedure consistently produced large effects indicating that participants spontaneously identified with and liked the studied group relative to the unstudied group.

Unexpected findings and elusive answers

Why does implicit partisanship (IP) occur? The minimalist quality of the procedure used to produce the effect seemingly confounds an obvious explanation. Interestingly, more than 30 years ago, Tajfel (1970) faced a similar, puzzling situation when he contemplated why arbitrarily categorized people would reliably discriminate in favor of their own groups. Of course, those initial studies (Rabbie & Horwitz, 1969; Tajfel, Billig, Bundy, & Flament, 1971) in what has become known as the minimal group paradigm (MGP) provided the impetus for the development of social identity theory (SIT; Tajfel, 1978; Tajfel & Turner, 1986), which in turn influenced the development of other major perspectives on group identification (e.g. Brewer, 1991; Hogg & Abrams, 1993; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). In explaining discrimination in the MGP, SIT researchers have focused on categorization as a sufficient condition (Tajfel, 1970). The idea is that people readily use existing information (i.e. group membership) to positively distinguish their group from another group as means to enhance social identity. In subsequent years, alternative perspectives have challenged the categorization perspective, emphasizing aspects of outcome dependence such as reciprocity (e.g. Gaertner & Insko, 2000). Although these explanations for the MGP findings may help explain the IP effect, that possibility seems unlikely because, unlike the MGP, the IP procedure does not explicitly categorize participants into groups, a fact that seemingly precludes the activation of concerns related to outcome reciprocity or to social identity. Similarly, it is uncertain whether other motivationally based theories can provide a satisfactory account of how spontaneous group membership occurs. For example, optimal distinctiveness theory (Brewer, 1991) focuses on the regulation of opposing needs for integration in and differentiation from *existing* group identifications. It is unclear how need regulation would produce spontaneous group identification or attraction.

For these reasons, it is not easy to see how a motivationally based interpretation would explain the spontaneous group identification and attraction that result from the name-study procedure. This consideration suggests that IP could represent either a significant new research model of the formation of group identifications or, alternately, a relatively unimportant oddity that results from an unusual procedure. There is a long history in science of phenomena that were treated auspiciously on initial appearance, but were later dismissed as inconsequential (Cartwright, 1973; Fleischmann, Pons, & Hawkins, 1989; Mostert, 2001). If IP is an oddity of little enduring value, it should be possible to easily modify the IP procedure to eliminate the effect.

There has not yet been much exploration of alternative possibilities for explaining IP. To test whether increased exposure to the studied names might account for IP findings, Greenwald et al. (2002) opposed the name-study procedure with additional name presentations of the other group's members. The results of two studies showed that this procedural variation did not eliminate the IP effect and thereby suggested that IP effects are not due to mere exposure. However, there are variations of the procedure other than differential name exposure that might provide the basis for narrow, rather than broad, accounts of the phenomenon. In the three experiments described below, we consider task variants that (a) de-emphasize the competitive relationship of the studied and non-studied groups, (b) use category exemplars referring to non-human groups in place of human groups, and (c) link novel groups to meaningful, existing in-groups and out-groups.

Overview of present studies

The strategy of the present series of experiments was to alter components of the original procedure with the aim of discovering what it would take to make the IP effect disappear. The experimental logic here is that of seeking interaction effects that reveal occurrence of the IP effect under some conditions and not others. Identification of procedures on which the IP effect depends will strongly constrain its possible theoretical interpretations (cf. Greenwald, Pratkanis, Leippe, & Baumgardner, 1986).

Experiment 1 examined the role of *group competition* by asking participants to imagine that the two novel groups were either working cooperatively or competitively to solve a task. If competition is a crucial component of the IP effect, then cooperative task instructions reducing intergroup competition should eliminate the effect. Experiment 2 explored the relevance of *group type* by replacing human names representing the groups with the names of novel automobiles. If the IP effect depends on human social categories, then studying the names of non-human groups should not produce spontaneous identification or attraction. Experiment 3 investigated *group identity* by linking the studied groups to relevant in-groups and out-groups. If the IP effect represents genuine identification, then identification with a novel group should be resisted when it conflicts with a meaningful, established in-group identity.

Experiment 1: Reducing group competition

Method

Participants Fifty-one undergraduate students at the University of Washington participated individually in exchange for optional course credit. Data for two participants were lost because of computer malfunction. Of the remaining total, 38 were female and 11 were male.

Design The design included four orthogonally varied, between-subjects variables: task orientation (cooperative vs. competitive), studied group (Purple vs. Gold), group associated with self and winning (studied group vs. non-studied group), and order of dependent measures (identification first vs. attraction first). Task orientation refers to instructions emphasizing the competitive relationship or cooperative relationship of two novel groups. Studied group refers to one of two groups, 'Purple' or 'Gold,' whose member's four names participants were initially asked to memorize. Group associated with self and winning refers to the pairing of the names of studied and non-studied groups with words related to 'self' and 'other' and 'winning' and 'losing' in dependent measures used to assess, respectively, implicit identification and attraction. Order of dependent measures refers to the order of the identification and attraction measures in the task sequence.

Procedure and measures Procedures and measures were adapted from Greenwald et al. (2002). Participants were seated in separate cubicles containing desktop computers. They first read an overview of the experimental tasks and then provided written responses to a few brief demographic questions. Participants next completed a computerized consent-to-participate form and a brief tutorial of the categorization tasks they would complete during the remainder of the study (see Greenwald et al.).

The name-study task Following the tutorial, participants in the *cooperative* task orientation condition read, on subsequent pages, the following:

> **The Scavenger Hunt Alliance**
>
> Imagine there are two teams of students who are cooperating in solving a campus-wide scavenger hunt. The goal of the hunt is to collect a certain number of items that organizers have scattered across campus. The scavenger hunt can only be completed with both teams working closely together in a cooperative fashion. If the scavenger hunt is successful, everyone wins the prize; otherwise, no one does. In order to help you learn the names of the scavenger hunt teams, we will ask you to memorize the names of the players from one team. The names of the Purple players (or Gold players, depending on the condition) will be presented . . . for 45 seconds. Please try to memorize the names.

A set of four names and the corresponding group name was then displayed in a centered, horizontal block for 45 seconds (*Purple group*: Janice, Milton, Laurel, Arthur; *Gold group*: Glenda, Lucille, Duncan, Roland). Participants in the *competitive* task orientation condition read similar instructions, except that the heading read 'Scavenger Hunt Competition', and the instructions emphasized that the hunt 'could only be completed by one team,' and that 'if the scavenger hunt is successful, everyone on the winning team receives the prize; no one on the losing team does.'

The group sort task The next task consisted of two blocks of 40 trials for which participants classified all eight of the player names into their respective groups following a procedure similar to the tutorial task. Specifically, participants classified singly presented names into the Purple and Gold groups using left-side ('d') and right-side ('k') keys representing each group. Category labels 'Purple' and 'Gold' remained on the display for the entire task. The name presentation was designed so that no more than three player names of the same group could occur in sequence, but that an equal number of names from each group would be presented in total. Response errors required correction in order for the procedure to continue.

Implicit identification measure Participants were next instructed:

> Now we would like you to imagine that you are going to participate in the scavenger hunt. In particular, please imagine that you are a member of the Purple team (Gold team). To help you associate SELF with the Purple team (Gold team), we will give you practice in grouping words referring to SELF together with the names of the Purple team players (Gold team players).

Participants then completed two blocks of 40 trials of a partial Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998) procedure first used by Greenwald et al. (2002). In the partial IAT procedure participants classify items representing four categories using response keys that map two categories onto each key. For the implicit identification measure, participants classified items referring to *self* (self, mine, me, my), *other* (other, them, their, they), the four Purple group names, and the four Gold group names. Half of the participants used response key configurations that matched *self* with *Purple* and *other* with *Gold*, while the other half of the participants used keys pairing *other* with *Purple* and *self* with *Gold*. Importantly, because the key pairings were made orthogonal to the name-study manipulation, half of the participants classified names from the group they had previously studied with *self* words, while the other half of the participants classified studied names with *other* words. Because response speed is taken to indicate the degree to which categories are associated in memory, an *automatic identification effect* would be represented by faster response times for participants who classified studied names with *self* words than for participants who classified studied names with *other* words.

Implicit attraction measure Either before or after the implicit identification measure (depending on counterbalancing condition), participants were instructed:

> Imagine at this point that you learned that prior to participating in the scavenger hunt one of the

> teams had won an award. Specifically, imagine that the Purple team (Gold team) won the award. To help you associate WINNING with the Purple team (Gold team), we will give you practice in grouping words referring to WIN together with the names of the Purple team players (Gold team players).

Participants then completed two blocks of 40 trials of the implicit attraction measure for which they classified items representative of *winning* (won, winners, success, win) and *losing* (lost, losers, failure, lose), along with the four names of the Purple and Gold groups. To complete this task, participants used one of two category-key pairings, *winning* + *Purple* and *losing* + *Gold* or *losing* + *Purple* and *winning* + *Gold*. Importantly, the group paired with *winning* on this task was also the group paired with *self* for the implicit identification measure. This constraint was added to simplify the experiment. Half of the participants classified names of the studied group with *winning* words, while the other half of the participants classified studied names with *losing* words. An *automatic attraction effect* would be represented by faster response times in classifying studied group names with *winning* words than with *losing* words.

Data treatment Prior to analyses, response latencies were cleaned following conventional procedures for treating partial IAT data (Greenwald et al., 1998). The first two trials of each block were deleted, latencies faster than 300 ms and slower than 3000 ms were recoded to those boundary values, and all latencies were log-transformed. Although all analyses were conducted using the log-transformed values, descriptive information presented in figures uses the raw millisecond units for interpretability.

Results and discussion

Preliminary analyses Two pre-manipulation measures were considered as possible covariates that might permit adjustment for extraneous variability in participants' responses. The first measure, the group sort practice task, was removed from consideration because responses differed as a function of an experimental variable, group studied (p = .05). The second measure, the initial tutorial task, was rejected because it was not significantly correlated with either of the dependent measures (smallest p = .08). Accordingly, the analysis of variance was conducted without covariates. In the analyses presented below, counterbalancing factors relating to the group studied and to the order of the identification and attraction measures were removed from analyses in which they had no significant effects (Aiken & West, 1991).

Implicit identification and attraction Figure 1 shows that participants were faster in associating the studied group with *self* relative to *other* on the implicit identification measure. The studied group advantage (153 ms) is evidence of automatic group identification ($F(1, 41)$ = 16.45, $p = 10^{-4}$, Cohen's d = 1.19). Surprisingly, identification effects were large in both the competitive (159 ms) and the cooperative (148 ms) task orientation conditions, and did not differ between the conditions ($F(1, 41)$ = 2.20, p = .15, d = .16). Additionally, overall responses on the identification measure were faster when the implicit attraction assessment preceded the implicit identification assessment ($F(1, 41)$ = 7.11, p = .01, d = .75).

Figure 1 also shows that participants responded faster when classifying studied group names with *winning* than with *losing* on the implicit attraction measure. The studied group advantage (193 ms) indicates automatic group attraction ($F(1, 45)$ = 18.90, $p = 10^{-5}$, d = 1.31). Similar to the results of the implicit identification measure, the implicit attraction effect was large in the competitive (177 ms) and in the cooperative (210 ms) task orientation conditions, which did not differ ($F(1, 45)$ = .23, p = .63, d = .15).

These results imply that group competition, as conveyed through the task orientation manipulation, is not central in producing IP. This possibility is surprising for two reasons. First, a sizable literature emphasizes competitive cues as an important basis for differentiating groups, which in turn serves as a precursor for intergroup bias and discrimination (e.g. Brewer, 1979; Turner et al., 1987). Second, research has shown that reducing intergroup

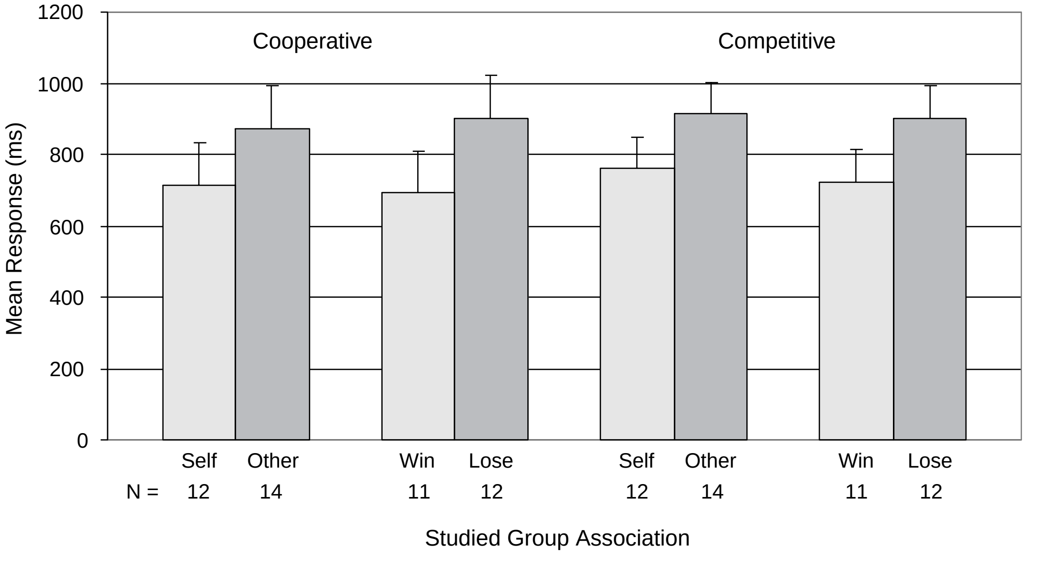

Figure 1. Mean latencies for implicit measures in Experiment 1. In both the cooperative and competitive conditions, participants more rapidly classified names they had studied with words referring to *self* than with *others*. Similarly, participants more quickly classified studied names with *winning* than with *losing*. Error bars represent standard deviations.

differentiation, for instance by creating superordinate group category representations, is effective in reducing intergroup bias (e.g. Gaertner & Dovidio, 2000). Framing the task as a cooperative enterprise between the groups should have eliminated a key basis for differentiating, and subsequently identifying with the novel groups. That it did not suggests two possible explanations for the results. First, participants may have simply ignored the experimental instructions. Although this explanation may account for a fraction of the subject responses, the procedure's description of the manipulation on multiple screens with salient reminders seemingly rules out interpretation of the results on this basis. This argument would be stronger had the procedure included a manipulation check to establish that subjects understood that the groups were working cooperatively. Second, despite heeding the instructions, participants could not help but to identify with the group featured in the name-study task. Besides accounting for the ineffectiveness of the task orientation manipulation, this interpretation implies more generally that spontaneous self-categorization may be difficult to overcome with manipulations commonly used in the study of intergroup cognition and behavior.

Experiment 2: Changing group type

Method

Participants

Forty-eight undergraduate students at the University of Washington participated individually in exchange for optional course credit (38 women and 10 men). Complete data were available for all participants.

Design Similarly to Experiment 1, the design included three orthogonally varied, between-subjects variables: studied group (ACE vs. STAR), group associated with self and winning (studied group vs. non-studied group), and order of the dependent measures (identification first vs. attraction first). For studied group, participants initially learned the names of automobiles produced by one of two novel automobile companies, 'ACE' or 'STAR'. For group associated with self and winning, participants classified the studied car names with words related to 'self' and 'winning' or 'other' and 'losing' for the identification and attraction measures. Finally, for order of the dependent measures, participants completed the identification and attraction measures in one of two orders.

Procedure and measures Procedures and measures from Experiment 1 were modified only slightly as necessary to accommodate the new scenario. Participants completed the same sequence of the tutorial, name-study task (*Ace Group*: Alto, Delica, Largo, Primera; *Star Group*: Aristo, Carina, Opel, Vitz), group sort task, and implicit measures. The name-study task was introduced with the following instruction:

> **The Automotive Industry Scenario**
>
> Imagine there are two rival car companies that are introducing new cars to the domestic market. Each company has four new cars to introduce this year. The cars are either from ACE Automotives or STAR Motors. In order to help you learn the names of the new cars, we will ask you to memorize the names of the cars from one company. The names of the STAR cars (or ACE cars, depending on the condition) will be presented . . . for 45 seconds. Please try to memorize the names.

The implicit identification measure was modified to read:

> Now we would like you to imagine that you are going to work for one of the car companies. In particular, please imagine that you are a member of STAR Motors (ACE Automotives). To help you associate yourself with STAR (ACE) we will give you practice in grouping words referring to yourself together with names of STAR's (ACE's) cars.

The implicit attraction measure instructions were as follows:

> Market analyses from the first quarter in which the new cars were on the market showed that competition was intense. But imagine that in the end, STAR (ACE) won the majority of the market share. To help you associate WINNING with STAR (ACE), we will give you practice in grouping words referring to WIN together with the names of STAR's (ACE's) cars.

Results and discussion

Preliminary analyses As in Experiment 1, latencies were log-transformed prior to analysis. Descriptive information is presented in raw millisecond metric in figures to aid interpretability. For Experiment 2, the responses on the tutorial and the group sort practice tasks both satisfied the analysis of covariance (ANCOVA) requirement that they not show any main or interactive effects with any of the experimental manipulations (all F ratios < 3.45, $df = 1, 40$). Only the group sort practice measure, however, was significantly related to the implicit identification and attraction measures. Results from analyses without the covariate were consistent with those presented in the text, which used this covariate. In the analyses presented below, counterbalancing factors relating to the group studied (Ace vs. Star) and the order of the identification and attraction measures were removed from analyses in which they had no significant effects.

Implicit identification and attraction Figure 2 shows that participants were faster in associating the studied group with *self* than with *other*. The studied group advantage (198 ms) is consistent with participants having automatically identified with the novel car companies ($F(1, 39) = 71.67$, $p = 10^{-10}$, $d = 2.45$). Unexpectedly, this identification effect was reliably larger for participants who studied Ace (283 ms) relative to Star (115 ms) ($F(1, 39) = 12.50$, $p = .001$). Nevertheless, the effect was still present for participants who studied the Star group ($F(1, 39) = 11.96$, $p = .001$, $d = 1.02$). Analyses also indicated that overall responses on the identification measure were faster when the implicit attraction measure preceded the implicit identification measure ($F(1, 39) = 4.45$, $p = .04$, $d = .61$).

Figure 2 also reveals that participants were faster in associating the studied group with *winning* than with *losing*. This average advantage of the studied group (214 ms) represents automatic liking for the novel car company (F(1, 43)

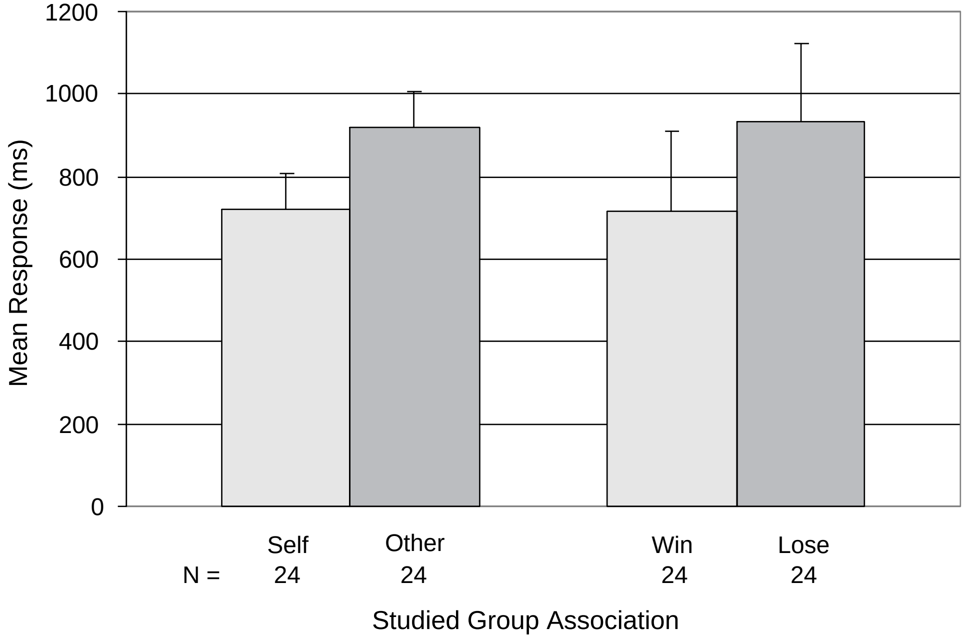

Figure 2. Mean latencies for implicit measures in Experiment 2. Participants more easily classified studied automobile names with *self* and *winning* than with *other* and *losing*. Error bars represent standard deviations.

= 73.86, p = 10^{-11}, d = 2.39). There was also a marginal trend for attraction effects to be larger when the implicit identification measure came first in the order ($F(1, 43) = 3.90$, $p = .06$, $d = .80$). The effect was still present, however, when the attraction measure came first ($F(1, 43) = 22.10$, $p = 10^{-6}$, $d = 1.34$).

These results suggest that the IP effect is insensitive to procedural variations in the type of group categories. Apparently, participants readily associated the non-human groups with *self*. It should be noted, however, that the study of novel automobile companies may imply relationships with imagined coworkers. In this sense, it is possible that there remained an unintended human component to the procedure that was intended to involve an inanimate group.

That people like inanimate objects is certainly not surprising. Past research shows that people unexpectedly develop preferences for and attachment to such diverse objects as pens and pseudo-Chinese characters (Jones, Pelham, Mirenberg, & Hetts, 2002; Zajonc, 1968). However, what distinguishes IP from the name-letter effect or mere exposure is that it presumably involves identification to groups or categories of objects, not just to particular stimuli. Greenwald et al. (2002; Experiment 3) attempted to demonstrate the importance of the group categories by replacing the names of the studied group—just prior to identification and attraction assessments—with names that shared group membership with the original names, but had not been previously studied. Unfortunately, the results were equivocal as to whether the substituted names inherited an IP effect from the original names. The present Experiment 3 focuses on the importance of the group category in an alternate fashion and has implications for locating the basis of the IP effect at the level of the group category.

Experiment 3 is important for an additional reason. The results of the first two experiments are consistent with the interpretation that IP is unexpectedly robust. This interpretation provides the basis for considering the numerous (potentially negative) implications of people unthinkingly and unwillingly identifying with and liking groups. However, an alternative perspective is that identification observed using the IP procedure is sufficiently dissimilar from more ordinary group identifications to be of much practical consequence. Experiment 3 directly tests this proposition. By opposing a novel group identity with an important, existing identity the character of spontaneous identification may be discovered. If IP represents *genuine* association with a novel group, it should be inhibited when the identity of the novel group conflicts with an existing identity.

Experiment 3: Variations in group identity

Method

Participants

Forty-nine undergraduate students at the University of Washington participated individually in exchange for optional course credit (32 women and 17 men). Complete data were available for all participants.

Design The design included three orthogonally varied, between-subjects variables: studied group (Circle vs. Triangle), left-right key assignment (Circle-Triangle vs. Triangle-Circle), and order of the dependent measures (identification first vs. attraction first). Studied group refers to one of two novel groups, 'Circle' or 'Triangle,' initially studied by participants. Left-right key assignment refers to the initial left-right team-key assignment during the practice sorting task. Order of dependent measures refers to the order of the identification and attraction measures in the task sequence.

Procedure and measures The procedure was similar to Experiment 1 except for five changes. The first change was that participants completed implicit and explicit measures of home (Washington, UW) and rival (Washington State, WSU) university identification (described below) in place of the tutorial. Participants were then introduced to an adapted scavenger hunt scenario featuring groups from UW and WSU. The second change was that prior to the name-study task participants were instructed to imagine that the participating university groups had chosen more specific group names for the competition (UW team always chose *Circle*; WSU team always chose *Triangle*). This instruction was the crucial manipulation that was intended to link existing groups, UW and WSU, to the otherwise novel experimental groups, Circle and Triangle. Participants next completed the name-study task (*Circle*: Erin, Jeremy, Kimberly, Adam; *Triangle*: Lisa, Daniel, Christina, Ryan) and four blocks of group sort practice. The third and fourth changes concerned the group sort task. Response key assignments on each block of this task alternated the left-right presentation of the Circle and Triangle names. In addition, during the first two blocks the words 'UW' and 'WSU' appeared in addition to and twice as often as the group names. In the remaining two blocks, 'UW' and 'WSU' appeared as often as the group names. The number of trials were adjusted in all of the blocks to assure that all eight group names would be presented twice in both sets of blocks (blocks 1–2 = 24 trials; blocks 3–4 = 20 trials). The additional 'UW/WSU' name presentation was included only in this task and not in the IAT assessments that followed. This detail was intended to help participants correctly associate the groups with the corresponding schools at the outset of the procedure. Following the group sort practice, participants completed IAT identification and attraction measures (described below). The fifth change was that the implicit tasks were not prefaced with imagination instructions as in previous experiments.

IATs For the purpose of method generalization, the partial IATs used in the first two studies were replaced with three standard seven-block IATs (Greenwald et al., 1998). The IATs were designed to measure implicit UW-WSU identification, Circle-Triangle identification, and Circle-Triangle attraction. For the UW-WSU measure, participants classified pictures clearly distinguishing each school (hats, mugs, jewelry, and clothing items) and words representing *self* and *other*. For the Circle-Triangle identification and attraction IATs, participants classified the eight names of the two groups and *self, other, winning, and losing* words. On critical blocks participants classified words using two combinations of target and attribute pairings (e.g. self + Circle/other + Triangle and other + Circle/self + Triangle). The order of the pairings was randomized. In each IAT, two initial single target and attribute practice blocks had 16 trials, a practice block preceding the second pair of critical blocks had 32 trials, and the four critical blocks each had 32 trials.

Explicit measures In addition to the UW-WSU identification IAT, participants also completed 3 explicit items designed to measure university identification. These items were (1) 'Please indicate the degree to which you identify or feel identified with UW (Huskies) relative to the WSU (Cougars)' (1 = strongly identify with UW (Huskies) to 7 = strongly identify with WSU (Cougars)), (2) 'I strongly identify with UW (Huskies)' (1 = strongly disagree to 7 = strongly agree), and (3) 'I strongly identify with WSU (Cougars)' (1 = strongly disagree to 7 = strongly agree). For analyses, the first and third items were reverse-scored and then summed with the remaining item (α = .50). Larger values reflect greater identification with UW relative to WSU.

Data treatment Prior to analyses, response latencies were cleaned following an improved algorithm for treating IAT data (Greenwald, Nosek, & Banaji, 2003). The important features of this method are that all trials with latencies < 10,000 ms are retained, practice and test blocks are used to compute IAT effects, and IAT effects are standardized using subject-specific variability.

Results and discussion

Preliminary analyses As expected, the initial implicit and explicit university identification measures revealed strong self-associations with UW relative to WSU (*implicit*: mean UW advantage = 216.60 ms, *SD* = 218.17 ms; *explicit*: *M* = 7.37 (midpoint = 12), *SD* = 3.22). Unfortunately, neither measure could be used for ANCOVA because neither measure was significantly related to the dependent variables. In analyses presented below, non-significant counterbalancing factors (order of IATs and order of left-right group sort key assignments) are also excluded.

Implicit identification and attraction Figure 3 shows that participants more easily associated the studied group with *self* than with *other* when the studied group was the Circle group (i.e. an imagined representative of UW) ($F(1, 47) = 57.85$, $p = 10^{-7}$, $d = 1.52$). This advantage (258 ms) represents a sizable identification effect. When the studied group was the Triangle group (i.e. an imagined representative of WSU), however, participants showed a much weaker effect (60 ms) of associating the studied group with *self* compared to *other* ($F(1, 47) = 5.18$, $p = .03$, $d = .47$). The difference in the magnitudes of effects between conditions was statistically significant ($F(1, 47) = 13.57$, $p = .001$).

Similar effects emerged on the implicit attraction measure. Figure 3 shows that participants were faster (147 ms) in associating the studied group with *winning* than with *losing* when the studied group was Circle (UW) ($F(1, 47) = 28.10$, $p = 10^{-5}$, $d = 1.06$). However, when the studied group was Triangle (WSU) participants showed a much weaker effect (56 ms), indicating greater difficulty in associating the studied group with *winning* compared to *losing* ($F(1, 47) = 4.00$, $p = .05$, $d = .41$). The difference in effect magnitude between conditions was also statistically significant ($F(1, 47) = 5.19$, $p = .03$).

In one condition in Experiment 3, participants' existing university identities were set in opposition to the identity of a novel group initially studied. Compared to a condition in which there was no such identity conflict, spontaneous identification and attraction effects were substantially reduced. This result is informative regarding the role of the group category in IP. The only substantial difference

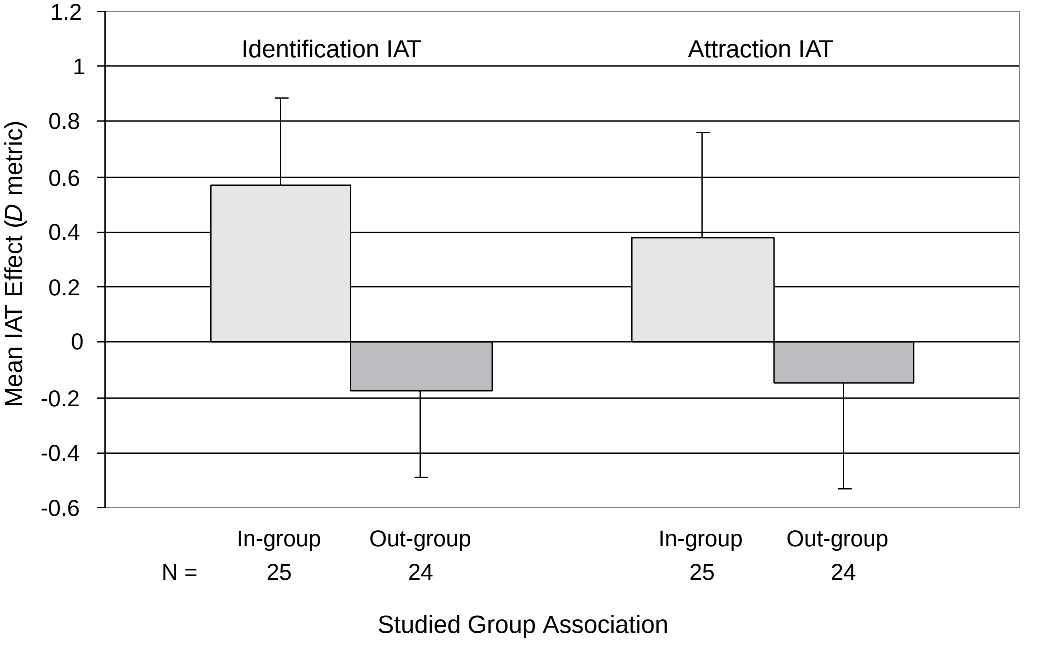

Figure 3. Identification and attraction IAT effects in Experiment 3. Participants displayed larger identification and attraction effects when the studied group represented participants' in-group (University of Washington: UW) compared to when the studied group represented a rival out-group (Washington State University: WSU). IAT effects were computed by subtracting the average response times for trials using *self-Circle* (in-group) response pairings from trials using *self-Triangle* (out-group) response pairings. Positive values indicate stronger identification and attraction with the in-group, whereas negative values indicate stronger identification and attraction with the out-group. The *D* metric is the recently introduced IAT scoring procedure (see Greenwald et al., 2003) that uses data from practice and test combined-task blocks along with individual-subject latency variability to compute IAT scores that have some characteristics of individual-subject effect size measures. Error bars represent standard deviations.

between the two conditions was the university affiliated with the novel groups. The resulting IP inhibition in the Triangle (WSU) condition clearly implies that the nature of group categories, and not the name stimuli, determines spontaneous association and liking with novel groups. This finding is important in that it substantiates the centrality of the group categories to IP, as argued by Greenwald et al. (2002). The finding is also important for establishing that IP represents a genuine association with the novel group. IP effects in the identity-opposed condition were the smallest yet observed with any variation of the IP procedure.

General discussion

The goal of the present investigations was to improve understanding of spontaneous identification and attraction to novel groups. The first two experiments revealed that the IP effect was more robust than originally anticipated. The name-study procedure was sufficient to produce IP despite a task description deemphasizing group competition (Experiment 1) or group categories representing non-human objects (Experiment 2). While revealing robustness of the IP effect, the lack of interaction effects in Experiments 1 and 2 prevented progress in theoretical interpretation (which depended on finding interaction effects).

Fortunately, Experiment 3 did produce the sought interaction-effect pattern. Experiment 3 showed a reduction of the IP effect when the studied group was linked to a rival university, compared to a studied group linked to participants' home university. This finding confirms the central position of the group categories in IP and fosters confidence that the IP effect has social psychological significance, indicating genuine identification with and attraction to a novel group.

The challenge of placing IP in a theoretical context

Earlier, we suggested that IP is not readily explainable using major theories of group identification that focus on motivation. To be compelling, a motivational theory must provide a rationale for how the phenomenon satisfies the presumed need. The major motivational theories relate group identification to concerns for (a) self-esteem (SIT), (b) self-balance (optimal distinctiveness theory, ODT; Brewer, 1991), or (c) self-clarity (subjective uncertainty-reduction model, SURM; Hogg & Abrams, 1993). According to SIT, group memberships play a central role in the definition of and attitudes toward the self. Through positively distinguishing one's groups from other groups, individuals may reap the rewards of social status. Because the novel groups in the IP procedure are left undescribed, it seems unlikely that IP would provide an outlet for this comparison process. Also, the imagined groups in the IP procedure do not provide the possibility of material exchange as a means for 'identification' such as can occur in the MGP, as required by outcome dependence explanations of MGP findings (e.g. Gaertner & Insko, 2000). Similarly, with ODT, it is unclear how tension between opposing needs for inclusion and differentiation might be satisfied through IP. Because the two potential target groups in the IP experiment (those with studied names and those with non-studied names) should have equal status in regard for their potential for the participant to feel different from or similar to others, the ODT principles should not apply. Finally, on the SURM view, groups provide an important outlet for individuals to derive attitudes, beliefs, and practices. In the IP experimental situation in which participants receive no differentiating information about the two groups, there should be no basis for either group to provide more uncertainty reduction than the other.

But what about theories focusing on cognitive aspects of identification, such as self-categorization theory (SCT; Turner et al., 1987)? SCT focuses on how self-definitions change as a function of the perceiver's environment. Central to determining one's self-categorization at any given time are the perceived similarities and differences of stimuli present in the immediate situation. SCT describes two commonly experienced categorizations as (a) personal (deriving from perceptions of differences of the self from in-group members) and (b) social (deriving from perceptions of differences between in-groups and out-groups). Can these ideas make sense of the IP phenomenon? One possibility is that, just as the momentary salience of an in-group can instigate a process of individuation (through personal categorization), the individuation of an otherwise unfamiliar group may itself create in-group ties where none existed previously. In other words, when asked to treat an unfamiliar group of individuals in a way that we ordinarily treat in-group members, we come to treat those individuals as part of the self (e.g. Smith & Henry, 1996). This notion of reciprocation figures prominently in work by McGarty (1999) on constraint relations in categorization.

A second possibility comes from Zajonc's (2001) recent analysis of mere exposure effects (Zajonc, 1968). Zajonc suggested that increased preference for novel objects following exposure may be accounted for by classical conditioning: the lack of aversive events during stimulus presentation becomes associated with the stimuli presented most often. In the same way, the lack of aversive events during IP's name-study procedure may trigger a positive association with the novel group.

Future directions

The absence of theoretical interpretation notwithstanding, the robustness of IP suggests several promising areas of additional inquiry. For example, given the ease of establishing implicit identification with a group, might this be a device that can mediate absorption of the traits and characteristics of that group? For instance, if participants are induced to implicitly identify with a group of elders, might this impair memory or reduce walking speed as has been found in the priming literature (e.g. Bargh, Chen, & Burrows, 1996)? A related possibility is whether spontaneous identification with a group will produce explicit discrimination, as has been found in MGP studies. These are but a few avenues for further research on this enigmatic phenomenon.

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