SOCIAL CATEGORIZATION OF SITUATIONAL GROUPS: THE ROLE OF COALITIONAL TRACKING

By

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ABSTRACT

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Research has shown that when people encounter other individuals, they can rapidly and efficiently keep track of information such as the sex, age, or coalition of those individuals. An outstanding question in the field is what kind of information individuals draw on to keep track of coalitions. Some theories of our coalitional psychology suggest that the essential ingredient for coalitions is the presence of cooperative and competitive goals – e.g. political parties that are competing for roles in government, basketball teams that are competing for points, etc. This leads to the prediction that merely perceiving that groups of individuals have competing goals will lead to categorization of those individuals in terms of coalitions even if the goals are restricted to a short-lived situation – i.e., the groups are situational. In three studies, the preponderance of the evidence indicates that situational goals are not enough to elicit coalitional categorization. This suggests that our psychology of coalitions may rely on more than just the patterns of competition and cooperation between those around us.

ACKNOWLEDGEMENTS

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Thank you, Joe, for being a better mentor than I could have hoped for.

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Introduction

To navigate social interactions successfully, individuals have to accurately identify the patterns of cooperation and competition around them. One way in which people may track those patterns is by mentally categorizing the individuals they encounter as belonging to cooperative groups. Research on social categorization has found that people easily identify whether others belong to large-scale, long-lasting, identity groups, such as racial, geographical, or political groups (e.g., Pietraszewski, Tooby, & Cosmides, 2014). Furthermore, this research suggests that membership in those groups is detected by cognitive mechanisms dedicated to tracking coalitions (e.g., Kurzban, Tooby, & Cosmides, 2001). However, cooperative and competitive interactions do not occur solely in the context of large-scale, long-lasting, identity groups. People often engage in competitive and cooperative of interactions without forming identities, at much smaller scales, and for shorter periods of time. For example, consider neighbors living on the same street. At times, some of the neighbors might have to cooperate to solve specific problems they are having that other neighbors are not, like fixing a lamp post on their side on the street. At other times, some of those neighbors will have to cooperate with new partners if a different issue demands it. The groups of people that arise in those situations may not last long, may include many individuals, or may form separate identities. Nonetheless, to be able to navigate those groups and solve the problems they are facing, individuals need to keep track of who is cooperating or competing with whom in each situation. To date, no research has addressed whether people keep a mental record of the groups that arise in such situations (i.e., situational groups), and if they do, whether they think of those groups as coalitions. The goal of this project is to address those questions.

Social Categorization and Coalitional Tracking

Research on social categorization has historically been focused on which social information individuals spontaneously encode and retrieve when they are interacting with others. One early and common measure of categorization is the memory confusion paradigm often called the "who-said-what" task (Taylor, Fiske, Etcoff, & Ruderman, 1978; see Figure 1). In this task, participants see, during the presentation phase, statements paired with pictures of individuals (targets) who vary on a dimension (e.g., sex). Then, during the recall phase, the participants are given a surprise recall test on who said each of the statements. If participants exhibit more recall errors confusing targets with the same characteristics (e.g., targets of the same sex) than targets with different characteristics (e.g., targets of the opposite sex), researchers infer that they had encoded information regarding that particular dimension (e.g., they categorized the targets in terms of sex).

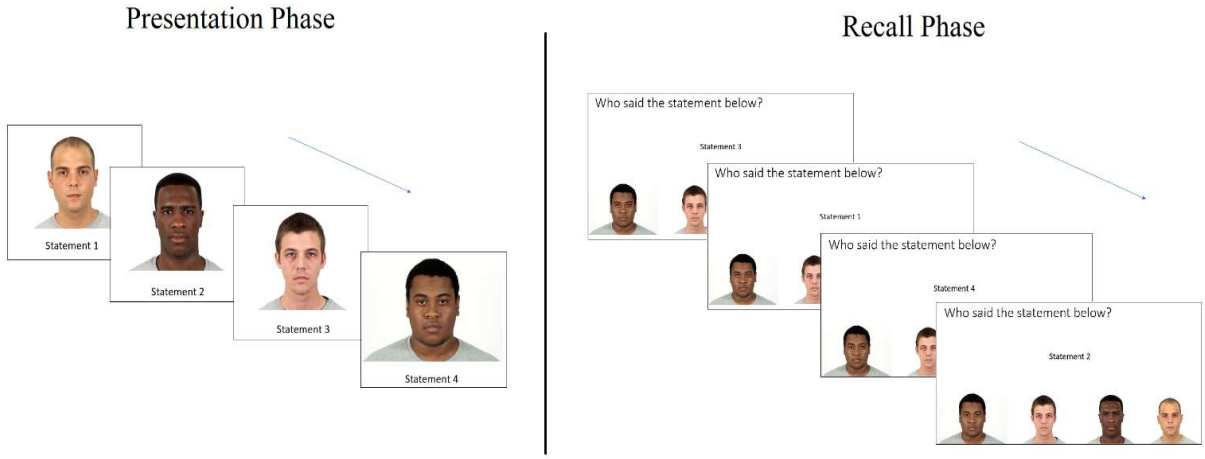

Figure 1. Phases of the who-said-what task.

Note. There is a 1-minute interval between the presentation and recall phases in which the participants complete an unrelated, filler task.

Most of the early work on social categorization led researchers to believe that age, sex, and race were "primary" categories people encode spontaneously and mandatorily (e.g.,

Hewstone, Hantzi, & Johnston, 1991; Stangor, Lynch, Duan, & Glas, 1992; Messik & Makie, 1989). They believed this because categorization in terms of sex, age, and race was found to be largely unaffected by contextual manipulations, while categorization in terms of other, "non-primary" dimensions (like hometown or university major) was found to be more malleable (e.g., van Twuyver & Van Knippenberg, 1995; Blanz, 1999). For example, Blanz (1999) found that, unlike sex categorization, categorization by educational group (students vs. pupils) was high only when educational group had been primed beforehand and when the attitudes expressed in the statements were diagnostic of the category (e.g., students had favorable attitudes and pupils had unfavorable attitudes).

Kurzban et al. (2001) later argued that while sex and age may be primary categories, race was unlikely to be one as well, despite the empirical findings thus far. Using an evolutionary framework, Kurzban et al. (2001) theorized that, in contrast to sex and age which are dimensions that were present during our environment of evolutionary adaptiveness and were likely useful sources of information about other individuals, race was not a meaningful dimension for our hunter-gatherer ancestors. During most of human evolutionary history, individuals were unable to travel far enough to encounter people of different races. Therefore, it would be implausible for individuals to encode race information as consistently as they do for sex or age information. In other words, it is unlikely that race is a "primary" category in the same sense as sex and age could be. Instead, Kurzban et al. (2001) argued, race categorization was the byproduct of an adaptation to track coalitions and alliances, which were recurrent and important features of our ancestral environment. If humans evolved cognitive mechanisms designed to track coalitions, these mechanisms must be able to (1) detect patterns of cooperation and competition and (2) learn cues associated with individuals' alliances. Because in segregated societies race is often

associated with patterns of cooperation and competition, individuals likely perceive race as a valid cue of current coalitions. (Indeed, this is likely to be true in any society with non-zero levels of segregation.) However, because coalitions change with the rise of new problems or the resolution of old conflicts, race cannot always be taken as a coalitional cue. If a different cue is a more valid indicator of coalition membership, then the cognitive mechanisms for coalition-tracking should use that cue instead of race. In other words, race is an "arbitrary" indicator of coalition in the sense that other dimensions can substitute for it if they provide better information about current coalitional status.

To test whether race categorization could be reduced if it ceased to be a valid coalitional cue, Kurzban et al. (2001) pitted race against another coalitional cue: basketball team jerseys. In a who-said-what task, participants were presented with basketball players from two teams. Half of the players from each team were black and the other half were white. Importantly, the statements made by the targets in the task implied an ongoing conflict between the teams. In one of the study's conditions, there were no visual markers of which team each player belonged to: all the players wore grey t-shirts. Therefore, those participants did not have a valid cue for coalition membership. The results in this condition mirrored results of previous studies: race categorization (i.e., the number of recall mistakes within-race minus recall mistakes between-races) was high while basketball-team categorization was low. However, in the study's second condition, one team wore yellow jerseys while the other team wore grey jerseys. Now, the basketball jersey color was a more valid cue of coalition membership than race. In this condition, Kurzban et al. (2001) found that race categorization was greatly reduced while team categorization increased. Their results suggest that participants kept track of race in so far as there were no other, more valid cues for the individuals' coalitions.

However, there was at least one alternative explanation for their finding. Instead of being caused by a dedicated coalitional-tracking mechanism, it could be the case that the reduction in race categorization was simply due to less attentional resources being available when two dimensions (race and basketball team) were crossed within the same task. If this alternative hypothesis is correct, then categorization in terms of any other dimensions, such as sex, should also be reduced when crossed with basketball team membership. Kurzban et al. (2001) tested this in a follow-up study and found that sex categorization was virtually unaltered even though coalition categorization was as high as it had been in the previous study. This indicates that insufficient attentional resources cannot explain why race categorization was reduced, and instead that the substitution of race for team membership is due to a shared underlying function – tracking arbitrary coalitional status. Additionally, because the basketball teams were made-up, the reduction in race categorization cannot be explained by an ingroup-outgroup tracking mechanism.

Following-up on Kurzban et al (2001), Pietraszewski and colleagues conducted multiple research projects investigating the coalitional nature of categorization. For example, Pietraszewski et al. (2014) tested whether explicit conflict between groups was necessary for coalitional tracking to occur. Instead of crossing race categorization with conflicting basketball teams as in Kurzban et al., they crossed race with two charity groups who were amicably describing their work to each other. Pietraszewski et al. (2014) found that participants categorized the targets in terms of charity group even though the targets were not engaging in conflict and even when there were no visual (only verbal) markers of charity group membership. Furthermore, categorization in terms of charity greatly reduced race but not sex

categorization. These findings suggest that conflict between the groups is not necessary to engage coalition-tracking mechanisms, distinct patterns of cooperation are enough.

In other work, Pietraszewski et al. (2015) investigated how people process information regarding political party affiliation. Like in previous studies, they crossed political affiliation with race and sex and found it interfered with race but not sex categorization. Additionally, they crossed political affiliation with age and found no reduction in age categorization supporting earlier suspicions that age is a "primary" dimension distinct from coalitional membership.

Finally, in a series of studies, Pietraszewski et al. (2014a, 2014b) investigated the nature of social categorization in terms of accent. Unlike race, accent was a relevant feature of social interactions in the human ancestral environment. While it could often serve as a cue for alliance patterns, it also afforded information regarding individuals' social origins (i.e., which community they were raised in, which language they speak) which was relevant for social interactions, perhaps especially during early development (Kinzler, Dupoux, & Spelke, 2007). In contrast to individuals' coalitional alliances, individuals' accents seldom change throughout their lifetimes. Therefore, the mind could have evolved a dedicated system for processing information related to accent that was independent from a coalition-tracking system. The results of Pietraszewski et al.'s (2014a, 2014b) studies not only show that individuals strongly categorize others in terms of accent, they also show that accent categorization is not a byproduct of coalitional tracking – i.e., it did not interfere with race categorization. Furthermore, they ruled out the alternative explanations that accent categorization is due to perceptual salience, ease-of-processing, or familiarity.

The Replicability of the Evidence

In recent years, many researchers have been raising concerns about the replicability of findings in psychology (e.g., Pashler & Harris, 2012). By one estimate, it is plausible that less than 50% of published effects are replicable (Open Science Collaboration, 2015). In that report, the subfield of social psychology appears to have an even lower rate of replicable findings than other subfields. Therefore, it is prudent to consider whether the evidence for coalitional tracking is robust.

The only original reports testing whether crossing race with other coalitions reduces race categorization are, to my knowledge, Kurzban et al. (2001), Pietraszewski et al. (2014), and Pietraszewski et al. (2015). To evaluate their results, it is useful to consider one of the strongest predictors of replicability: *p*-values (OSC, 2015). An excess of *p*-values between .01 and .05 are indicative of upwardly biased estimates of effect size usually driven by publication bias and p-hacking (Simmons, Nelson, & Simonsohn, 2011).

Throughout Kurzban and Pietraszewski et al.'s 12 tests of the effect of coalitions on race categorization, 9 the *p*-values are under .01 with 3 being under .001. Most of these tests are close replications extending the results to other conditions (e.g., female targets, statements that do not convey coalition information). Furthermore, Voorspoels, Bartlema, and Vanpaemel (2014) report a successful pre-registered direct replication of Kurzban et al. (2001) providing independent confirmation of the effect. In sum, the evidence of a reduction in race categorization when crossed with other coalitions appears to be robust.

Situational Groups

Overall, these studies suggest social categorization of groups such as sports teams, organizations, and political affiliation is driven by a system dedicated to tracking coalitions. The

groups investigated so far all share certain features: they often contain many individuals, are long-lasting, and nurture a sense of group identity via the use of symbols or titles. However, coalitional dynamics are not restricted to groups with these characteristics. The cooperation and competition that underlie coalitions can and frequently do happen in very short-lived situations between few individuals who do not develop a sense of identity because of their interactions. These situational groups often arise when multiple individuals have to engage in coordinated action, but do not all agree on which course of action to take. A few examples of situations in which this type of group may emerge are employees voting on a company policy, students choosing a topic for their group project, or friends deciding what to do when they go out. If the individuals in these situations do not all agree on the course of action they should take (i.e., which policy to implement, which topic to choose, and what to do when they go out), then the disagreement can create *situational* coalitions. In order to navigate these situations, the individuals must keep track of which goals each of the members have and whether their goals compete with or complement one another.

Research on interdependence theory has argued that how people's goals relate in a situation is central to their behavior in that situation (Johnson & Johnson, 2005). In fact, interdependence is defined as the state in which peoples' goals depend on each other. Recent research demonstrates the importance of interdependence in situations. Gerpott et al. (2018) had individuals describe the last time they were in social situation and answer a number of questions regarding their perceived interdependence and felt emotions. They found that people can reliably differentiate situations according to their dimensions of interdependence (mutual dependence, future dependence, power, conflict, and informational uncertainty). They also found that the dimensions of interdependence are distinctly related to certain emotions. For example, when

participants reported high levels of mutual dependence and conflict, but low levels of information uncertainty, they also reported feeling more anger. Finally, perceived interdependence in their study was related to self-reported cooperation ("how much does your behavior benefit the other person?") such that more interdependence in a situation was associated with more cooperation.

Interdependence between individuals is a key requirement for coalition formation and maintenance. If an individual's goals do not complement the goals of others (i.e., there is no interdependence), then those individuals do not stand to gain from forming a coalition (Tooby & Cosmides, 1988). This is true for coalitions of any size or duration and regardless of whether it involves an identity. In fact, nurturing a sense of identity may function to maintain perceptions of interdependence between individuals of that group across situations. In that sense, interdependence should be the main factor for detecting coalitions in one's environment. Whether or not nurturing an identity specifically functions to maintain perceptions of interdependence, detecting interdependence within a situation should be sufficient to trigger coalitional thinking.

In a parallel but related line of research, work on entitativity has attempted to determine when collections of individuals are perceived as cohesive groups (i.e., are seen as an entity; Hamilton, Sherman, & Castelli, 2002). For example, Lickel et al. (2000) had participants rate various types of groups (e.g., members of a sports team, women, people at a bus stop) on a number of factors such as the permeability and size of the groups, whether the members shared goals, and whether they qualified as a group (entitativity). Consistent with the work on interdependence, whether the members shared goals was a strong predictor of entitativity. However, groups seen as "transitory" or whose members were only "loosely associated" had the

lowest entitativity (e.g., people at a bus stop). Therefore, if situational groups are perceived as transitory or loosely associated (due to their situational nature), it is possible that they will be seen as lowly entitative and not processed as competing coalitions.

In sum, evolutionary theories of group dynamics predict that individuals will be categorized according to the patterns of interdependence in the situation regardless of whether the nature of the group is situational. However, research on entitativity suggests that situational groups may not be seen as groups. This project will test whether individuals categorize others according to their situational groups and whether this categorization is coalitional. Addressing these questions will shed light on how people think about groups and will advance our understanding of how the coalitional-tracking system works.

The Present Research

To test whether situational groups are processed by the coalition-tracking system, I had participants complete the who-said-what task either involving or not involving situational groups (situational groups present vs. absent) which were either crossed with a non-coalitional dimension (sex or age) or a coalitional dimension (race or political affiliation). For the situational-groups-present conditions, the situations in the task consisted of individuals who disagreed on which course of action they should take as a group (in the situational-groups-absent conditions, they did not disagree). In Studies 1 and 2, the situation was a group of friends who were deciding what to do for dinner. To create situational groups, half of the friends wanted to eat at a restaurant while the other half wanted to cook dinner themselves. In Study 3, the situation was a group of individuals who worked at a town hall were deciding where to schedule an event. Here, the situational groups were created by having the targets argue over which of two places they should schedule the event. Thus, in situational-groups-present conditions there were

two competing groups of interdependent individuals. Importantly, the reasons for their interdependence did not reference any larger group identities or visual markers. Rather, they were all "situational" reasons. In the studies' situational-groups-absent conditions, the statements were modified such that the targets expressed ambivalent goals, which signaled no interdependence in the situation.

Study 1 tested whether race, but not sex, categorization is reduced when crossed with situational groups. Studies 2 and 3 determined whether this effect generalizes to different coalitional and non-coalitional dimensions. Specifically, Study 2 crossed situational groups with race and age (a non-coalitional dimension) and Study 3 crossed situational groups with sex and political affiliation (a coalitional dimension).

Pilot Study

One important assumption of these tests is that people categorize others in terms of situational groups (regardless of whether the categorization is coalitional). Because this assumption has not been tested before, I conducted a pilot study to test whether people categorize in terms of situational groups when they are not crossed with other categories.

Method. Participants were 183 undergraduate students from the subject pool at Michigan State University who participated in exchange for course credit. 78% were female and 66% were White (12% Asian, 11% Black).

Participants completed a version of the who-said-what task similar to the ones used by Kurzban, Pietraszewski, and colleagues (2001, 2014, 2015). In this task, participants were asked to form impressions of individuals having a conversation. Before they were shown the individuals (i.e., targets), participants read a description of the situation. Participants in both conditions read about the same situation: eight friends who work in the food industry got

together to have dinner but could not decide whether to eat at a restaurant or cook dinner for themselves (see Appendix A for the full description). They were told that each target's picture would be paired with the statement that target was making.

After reading about the situation, participants were asked four multiple-choice questions testing their knowledge of what they read and what they were supposed to do for the task. If they did not answer all questions correctly, they were asked to read the description and answer the questions again. If they failed to answer all questions correctly a second time, they were shown a very summarized version of the instructions and situation and continued with the task. Approximately 88% answered all questions correctly the first time while 98% answered all correctly by the second time (similar checks were used in subsequent studies which found similar percentages).

Next, participants were shown the targets paired with statements. There was a total of 24 trials – each of eight targets made three different statements – that lasted 15 seconds each. In the situational-groups-present conditions, half of the targets were paired with statements indicating they wanted to eat dinner at a restaurant while the other half were paired with statements indicating they wanted to stay in and cook dinner. Odd trials had "go out" statements and even trials had "stay in" statements. In the situational-groups-absent conditions, all of the targets were paired with statements expressing indecision about whether they wanted to go out or stay in (see Appendix B for a complete list of statements in both conditions). After they were shown all of the targets and statements, participants completed a 1-minute filler task (naming all the capitals in the US) to reduce the likelihood of rehearsal effects on memory. Subsequently, participants were tested on their memory of who said each of the statements. They were presented with

individual statements in a random order and asked to select the target they thought made the statement. Finally, participants were asked to report their age, gender, and race.

Categorization Scores. The extent to which participants categorize the targets by one or another category is inferred from the errors participants make in the task – i.e., when they select an incorrect target in the recall task. If when they make mistakes, they are more likely to select someone from the same category as the correct individual than someone from a different category, then one can infer that categorization occurred for that participant. For example, if for statements that were made by black targets, participants are more likely to select incorrect black targets than white targets, then participants are given higher scores on categorization in terms of race (see Figure 2).

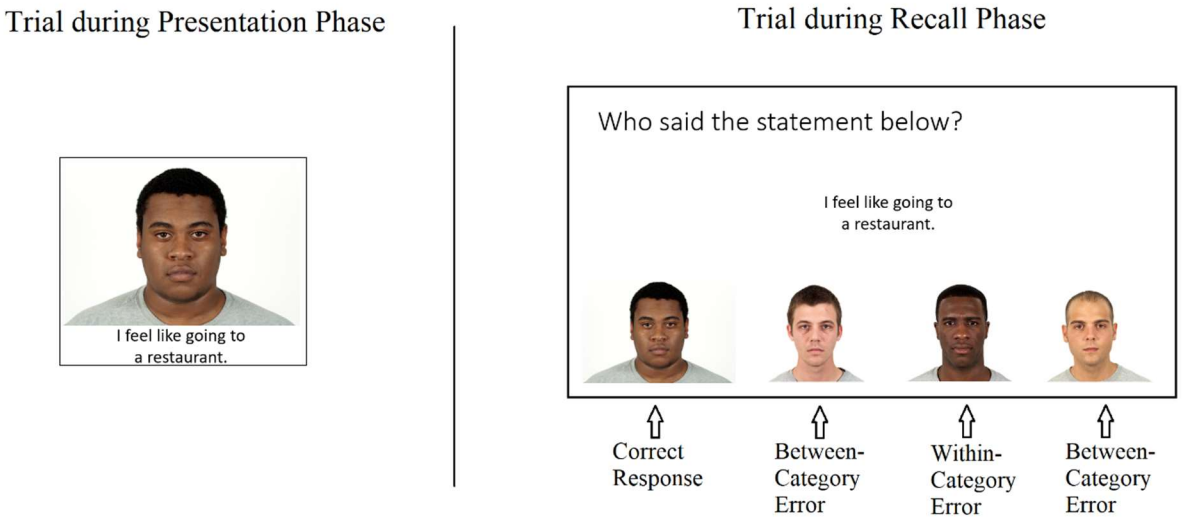

Figure 2. Types of errors in the who-said-what task.

In practice, the categorization score is calculated by subtracting the number of between-category errors (e.g., confusing targets of different races) from the number of within-category errors, corrected for the fact that there are more possibilities for between- than within-category errors (e.g., for a statement made by a white target, only 3 different white targets can be

incorrectly chosen while 4 black targets can be incorrectly chosen). This scoring procedure was used to calculate a situational-group categorization score for each participant (Bor, 2018).

Results and Discussion. To test whether participants categorized in terms of situational groups, the mean categorization score in the situational-groups-present condition was compared to the mean score in the situational-groups-absent condition. This test revealed that participants categorized significantly more in the situational-groups-present condition ($M = 3.43$, $SD = 5.20$) than in the absent condition ($M = 0.43$, $SD = 3.86$), Welch $t(169.2) = 4.44$, $p < .001$, $r = .32$. Furthermore, the categorization effect in the situational-groups-present condition was significantly different from zero, $t(114) = 7.08$, $p < .001$, $r = .55$, while in the situational-groups-absent condition it was not, $t(68) = 0.91$, $p = .366$, $r = .11$. The size of the categorization effect for situational groups was similar to that found by Kurzban et al. (2001) and Pietraszewski et al. (2014) for basketball teams and charity organizations. If categorization by situational groups functions similarly to categorization by larger-scale, longer-lasting, identity groups, then crossing situational groups with political affiliation, race, sex, and age should also reduce race and political affiliation categorization but not sex and age categorization. I tested those predictions in the studies described below which were all pre-registered at the Open Science Foundation (https://osf.io/vufzx/).

Study 1

This study will test the main hypothesis using the situation of a group of friends deciding what to do for dinner. Friendships typically entail high cooperativeness and interdependence between those involved. While a group friends might usually be processed as belonging to one coalition (given their high interdependence), when members of the group disagree on a course of action, the interdependence between the friends changes creating two situational coalitions. Thus, participants observing the situation should categorize the individuals into the two coalitions.

This study will cross situational groups with sex and will have a similar design as previous studies that tested similar hypotheses: a 2 (target demographic manipulation: race vs. sex) x 2 (situational-groups manipulation: present vs. absent) between-subjects experimental design.

Method

Participants. Previous studies with a similar design detected a reduction of approximately $r = .30$ in race categorization (Pietrazewski et al., 2014). To achieve a statistical power of 99% to detect a similar effect, I aimed to collect data from 300 individuals. Participants were excluded if they reported not paying attention to the task or reported completing the study on a phone or tablet (total excluded = 103; the same exclusion criteria were used for all studies). The final sample was 310 undergraduates recruited from the department subject pool, mostly female (75%) and White (70%; Asian: 12%; Black: 8%; Hispanic: 4%).

Measures and Procedure. The study was conducted online and used a similar who-said-what task as in the pilot study. A key difference was that the participants were randomly

assigned to see either black and white targets or male and female targets[1] (pictures of individuals from the Chicago Face Database; Ma, Correll, & Wittenbrink, 2015) and to either of the two situational-groups conditions (present or absent). For each participant, two separate categorization scores were calculated: one for situational-groups categorization and one for race/sex categorization (depending on the participant's condition).

To increase the generalizability of the results, the stimuli in certain phases of the who-said-what task were randomized in the following ways. During the study phase, participants saw the face stimuli in one of 10 partially random orders. The only constraints on randomization were that each face was associated with 3 consistent statements (e.g., 3 statements expressing the goal of going out) and that the first four targets participants saw were in the following order: (1^{st}) black or female target who wanted to go out, (2^{nd}) black or female target who wanted to stay in, (3^{rd}) white or male target who wanted to go out, (4^{th}) white or male target who wanted to stay in. This randomization strategy was used in previous studies and ensured that participants noticed early on that race or sex were orthogonal to the situational goals. During the recall phase, participants saw the statements in a completely random order. For each statement, the participants were shown the eight faces side-by-side in one of four random orders.

At the end of the study, participants indicated their attentiveness to the who-said-what task by selecting one of four responses: "Yes, I completed the task with my full attention," "I was distracted a few times, but I don't think it affected my performance on the task," "I was distracted and I feel that affected my performance on the task," "I was not paying attention to the task." Participants were also asked whether they felt we should use their responses, to which they

[1] Male targets will be used in the race condition because race categorization effects seem to be slightly larger for male than female targets (Kurzban et al., 2001). White targets will be used the sex condition because most participants in the subject pool are white. However, similar effects would be expected if the targets in the sex condition were black.

answered by selecting one of two options: “Yes, I completed the study in good faith,” “No, I did not provide honest responses or didn’t pay attention to the tasks.” Finally, they were asked whether they completed the study on a computer or a phone/tablet.[2] These response-quality questions and randomization procedures were also used in Studies 2 and 3.

Results

If situational goals are processed as coalition-indicators, then crossing situational goals with race and sex in the who-said-what task should reduce race categorization more so than it reduces sex categorization. To test this, a two-way ANOVA was run with target demographic manipulation (sex vs. race), situational groups (present vs. absent), and their interaction predicting sex/race categorization. As in previous studies, people tended to categorize in terms of sex more than in terms of race, $F(1, 306) = 2.82$, $p = .094$, $\eta_p^2 = .010$. However, the effect of interest is the interaction between target manipulation and situational groups which was also marginally significant, $F(1, 306) = 3.75$, $p = .054$, $\eta_p^2 = .012$. Furthermore, the simple slopes revealed a pattern of effects consistent with the hypothesis: there was a significant decrease in race categorization from the situational-groups-absent condition to the situational-groups-present condition, $t(152) = 2.59$, $p = .010$, $\eta_p^2 = .04$, and no significant decrease in sex categorization from the situational-groups-absent to the situational-groups-present condition, $t(154) = -0.04$, $p = .970$, $\eta_p^2 < .01$ (see Figure 3). There was no main effect of the situational-groups manipulation, $F(1, 306) = 0.00$, $p = .971$, $\eta_p^2 < .001$.

[2] Participants were excluded if they indicated that they did not pay attention to the task, were distracted and feel it affected their performance, did not provide honest answers, or completed the study on their phone/tablet. The exclusion criteria were the same across studies and were decided on before data was collected.

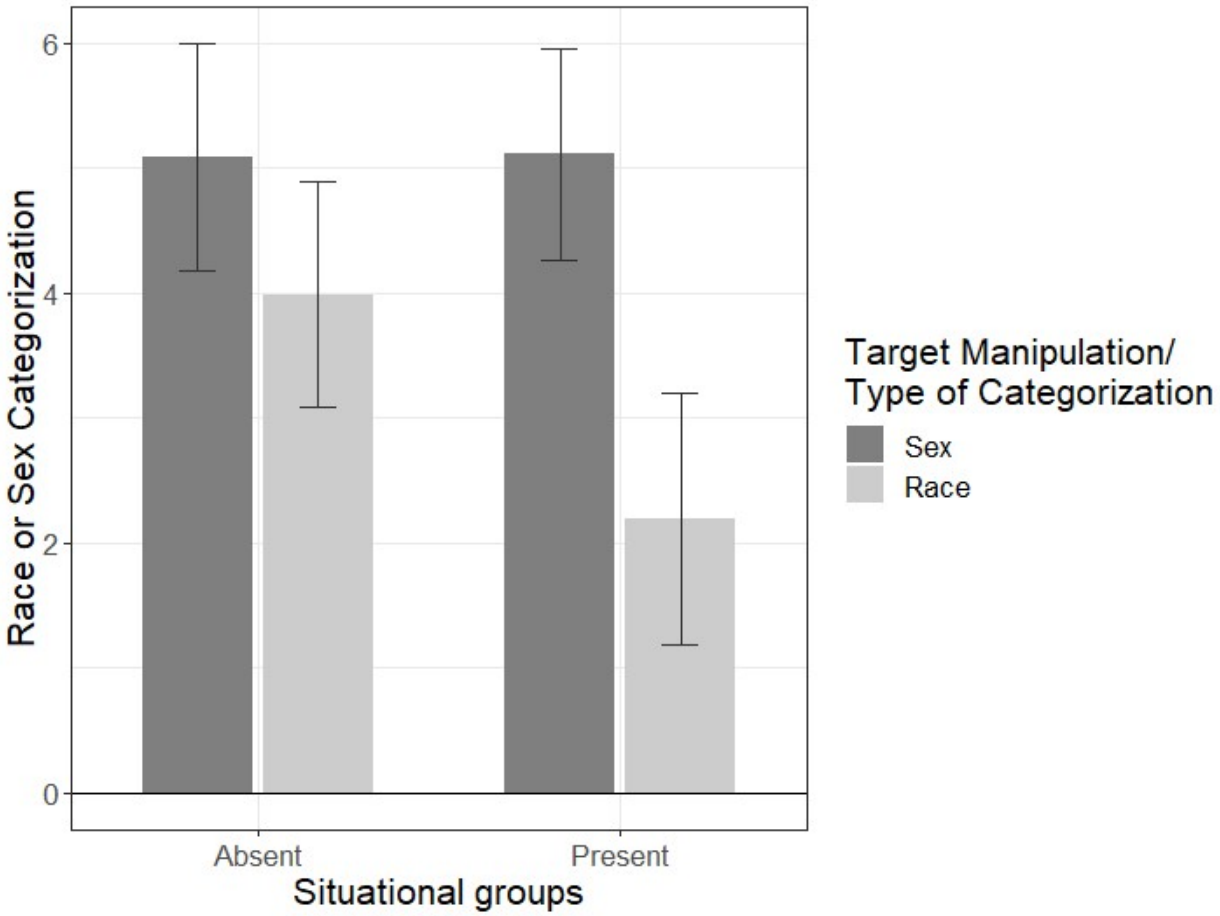

Figure 3. Study 1: Race/Sex Categorization in Each Condition

Note. Error bars are 95% CIs.

A separate two-way ANOVA was also conducted with both manipulations and their interaction predicting situational-group categorization. Only the main effect of situational group was significant: those in the situational-groups-present conditions categorized in terms of situational groups while those in the situational-groups-absent conditions did not, $F(1, 306) = 23.72$, $p < .001$, $\eta_p^2 = .07$ (see Figure 4).

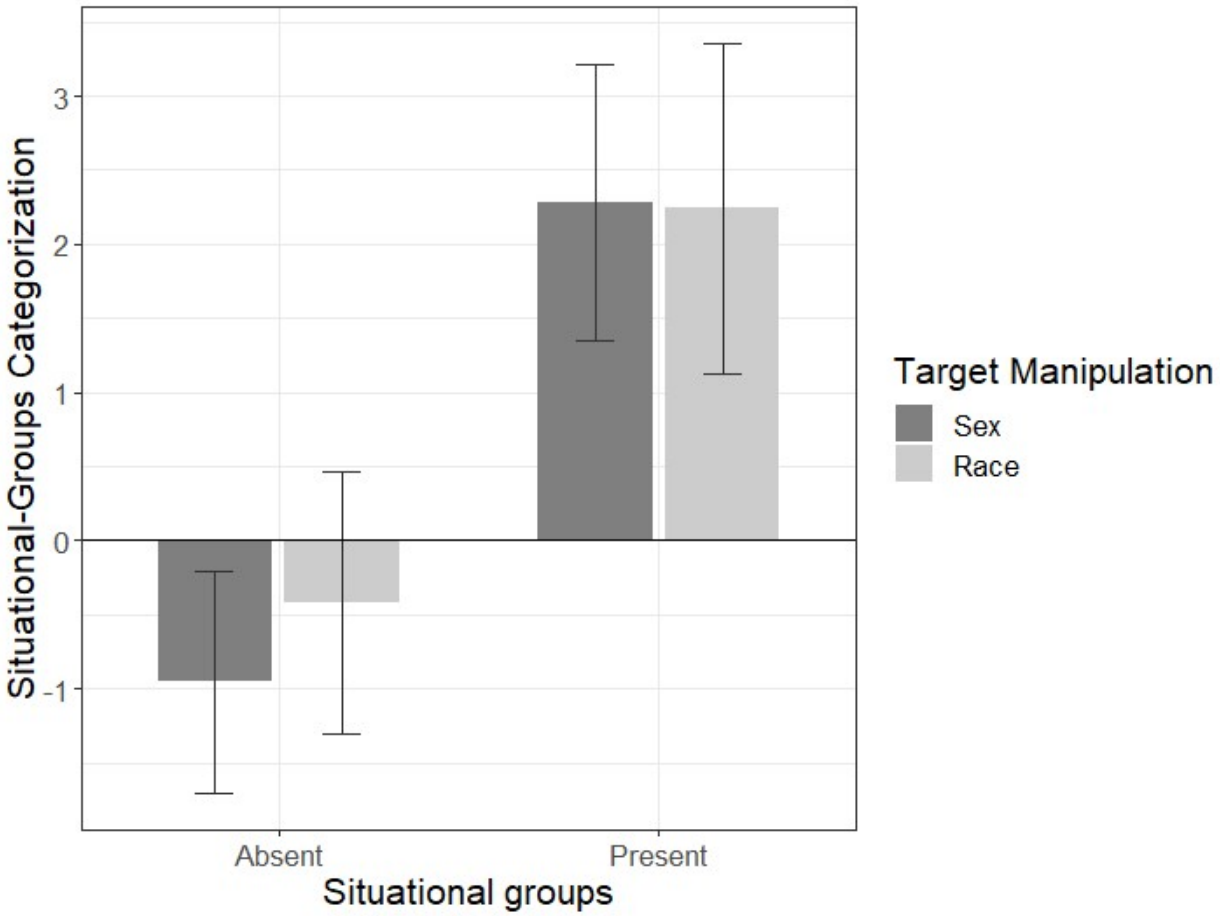

Figure 4. Study 1: Situational-Groups Categorization in Each Condition

Note. Error bars are 95% CIs.

Discussion

The pattern of effects described above provides initial, albeit uncertain, evidence that coalitional tracking has a role in situational-group categorization. However, there are limitations with this study that warrant some caveats. First, this study only shows situational group categorization for one situation. While there does not seem to be something unique about that situation that would drive the coalitional-tracking effect, it may be the case that categorization of other situational groups does not rely on the same process. Thus, it may be more accurate to characterize this study as a proof-of-principle test that coalitional tracking can underly situational-group categorization.

A second potential limitation concerns the difference between race and sex categorization. Testing the effects of situational categorization on both race and sex categorization is done with the intention of ruling out the possibility that the reduction in race categorization is due to general attention requirements of crossing two different dimensions in the task. If that was driving the reduction in race categorization, then it should also reduce categorization by sex. However, there may be other reasons why we would see a reduction in race but not sex categorization. For example, it may be the case that crossing sex with those specific situational groups increases the accessibility of sex which offsets a reduction in sex categorization. While that is ultimately an empirical question, a "group of friends who work in the food industry deciding what to do for dinner" does not appear to prime sex any more so than it does race.

Study 2

To at least partially address the limitations mentioned above, Study 2 will replicate and extend Study 1 to a different primary dimension: age. If the present hypotheses are correct, this study should find that the presence of situational groups reduces race categorization but not age categorization. This change will mitigate concerns about whether Study 1's findings are due to the accessibility of sex in that specific situation. Provided that age is not made more accessible by the situational groups, then this study may offer converging evidence for the coalitional tracking of situational groups. Furthermore, given the weak evidence of Study 1, replicating it will provide a more definitive test of the hypothesis. The design of this study will also be a 2 (target demographic manipulation: race vs. age) x 2 (situational-groups manipulation: present vs. absent) between-subjects experimental design.

Method

Participants. To reach the preregistered sample size of 500 individuals, data was collected from three sources: undergraduates recruited both online (16%) and in-person (35%), and online workers on the Prolific platform (50%). Fifty-three participants were excluded for reporting that they either did not pay attention to the tasks or completed the study on their phone. The final sample size after these exclusions was 511 of which most were female (65%) and White (72%; Asian: 9%; Black: 7%; Hispanic: 5%).

Measures and Procedure. The measures and procedure used in this study were the same as those of Study 1 except for the age condition, which used similar stimuli to Pietraszewski et al.'s (2015): white, male individuals who are either twenty-year-olds or seventy-year-olds. These stimuli were drawn from the FACES database (Ebner, Riediger, & Lindenberger, 2010).

Results

As in Study 1, a two-way ANOVA was run with target demographic manipulation, situational groups, and their interaction predicting categorization. In contrast to the results of Study 1, the interaction term was not significant, $F(1, 507) = 0.00$, $p = .999$, $\eta_p^2 < .01$. Instead, both race and age categorization were lower in the situational-groups-present condition than in the situational-groups-absent condition, $F(1, 507) = 6.37$, $p = .012$, $\eta_p^2 = .01$. There was also a main effect of target demographic manipulation such that age categorization was stronger than race categorization, $F(1, 507) = 27.09$, $p < .001$, $\eta_p^2 = .05$ (see Figure 5).

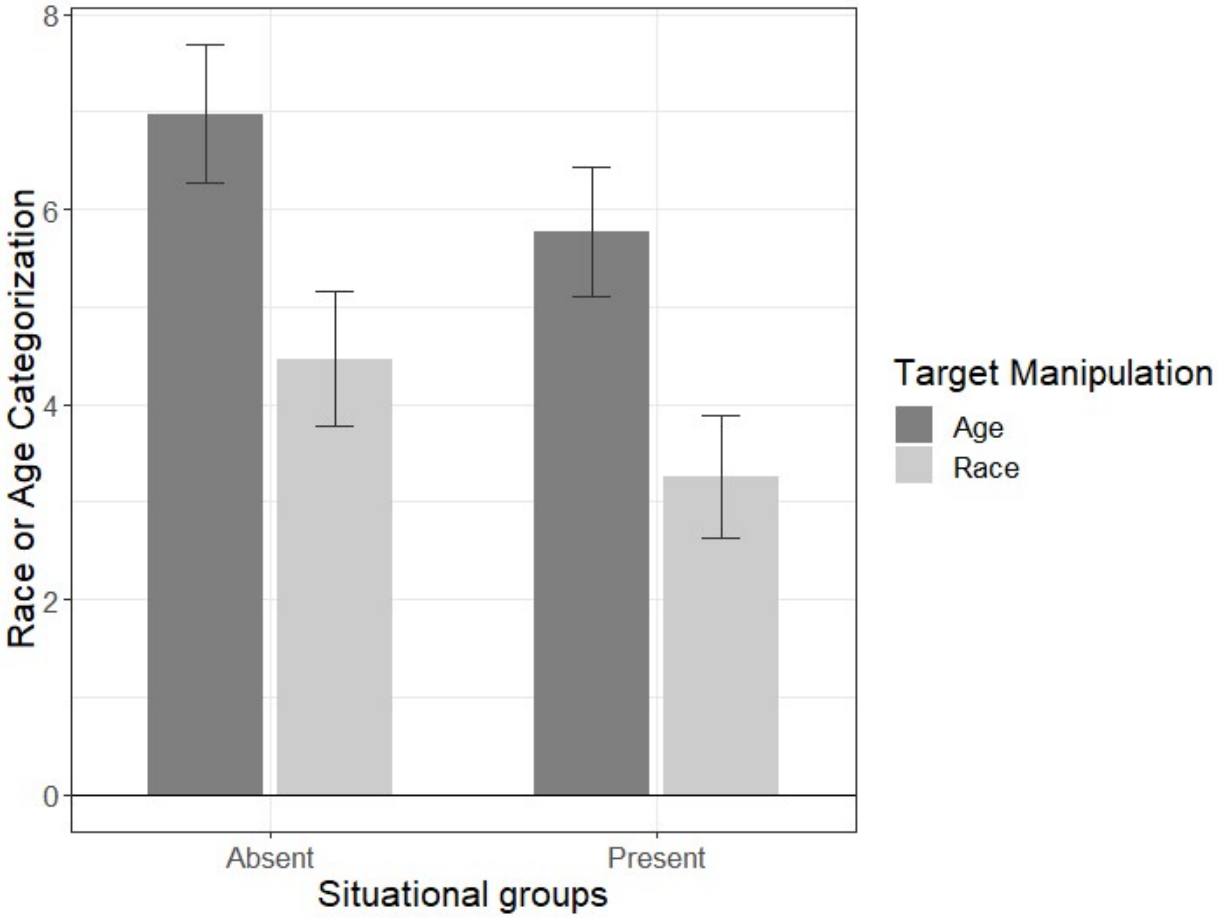

Figure 5. Study 2: Race/Age Categorization in Each Condition

Note. Error bars are 95% CIs.

Furthermore, as in Study 1, categorization in terms of situational groups only occurred in the situational-groups-present conditions, $F(1, 509) = 44.56$, $p < .001$, $\eta_p^2 = .08$. There were no main effects of target demographic manipulation or of the interaction term on situational categorization (see Figure 6).

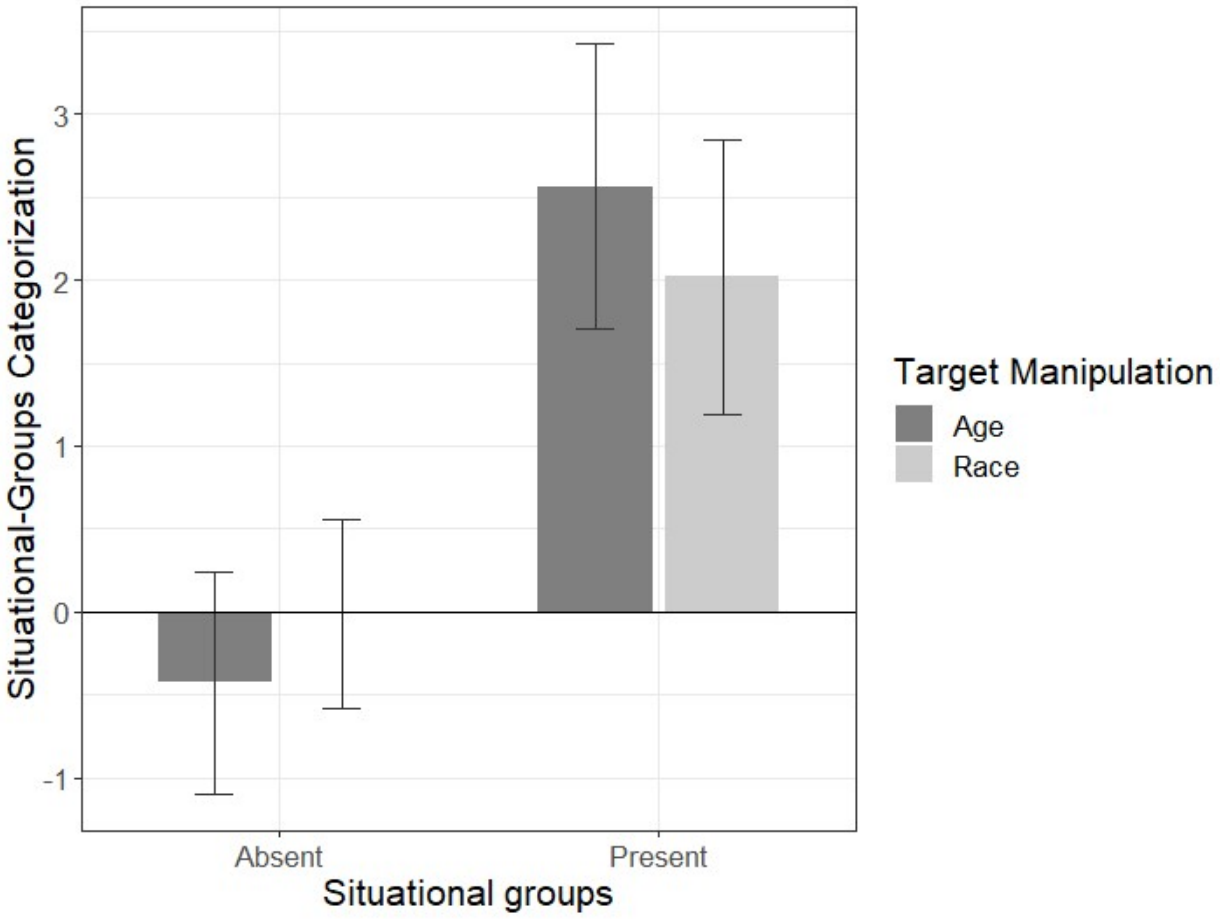

Figure 6. Study 2: Situational-Groups Categorization in Each Condition

Note. Error bars are 95% CIs.

Discussion

This study aimed to replicate and extend the results of Study 1 to a different primary category: age. While a small but significant reduction in race categorization was found, there was a similar reduction in age categorization, which would not be expected according to the coalitional-tracking hypothesis. These results are difficult to reconcile with the results of Study

1. If situational groups are processed as coalitions and race – but not sex or age – is a coalitional indicator, then race categorization should be more affected by the introduction of situational groups then sex or age categorization. The finding that both race and age categorization – but not sex categorization – are equally affected by the introduction of situational groups could be an indication that the specific situation chosen for the studies drew participants' attention toward sex as a dimension which offset a reduction in sex categorization that would otherwise have occurred. In Study 3, sex will be crossed with situational groups but in a different situation that hopefully will not have the same effect as the one used in the first two studies.

A noteworthy caveat to the finding that age categorization was affected by situational groups is that the size of the reduction in age categorization was small and similar to what Pietraszewski et al. (2015) found when crossing age with political affiliation (i.e. from $r = .86$ to $r = .83$). The sample size of this study was large enough to detect a significant change; however, the magnitude of the change was negligibly small. Similarly, the reduction in race categorization was significant but considerably smaller ($r = .75$ to $r = .67$) than what Kurzban and Pietraszewski found in their studies (e.g. $r = .70$ to $r = .40$). Indicating that situational groups did not greatly affect race categorization.

Study 3

In addition to crossing situational groups with sex, Study 3 will also attempt to extend the findings of the previous studies to a new coalitional group: political affiliation. As reviewed above, Pietraszewski et al. (2015) demonstrated that political affiliation is processed as a coalitional dimension. If situational groups are also processed as coalitional dimensions, then crossing them with political affiliation should reduce categorization in terms of political affiliation. Furthermore, because sex is not a coalitional dimension, this reduction should be greater than any reduction in sex categorization. This study will test this prediction in a 2 (target demographic manipulation: sex vs. political affiliation) by 2 (situational groups: present vs. absent) between-subjects experiment.

Method

Participants. The preregistered sampling plan for this study was to use a composite adaptive open sequential test (COAST; Frick, 1998) to determine the final sample size. This method is a more efficient data collection strategy because it allows multiple testing as the sample size increases while keeping the probability of a false positive result low. COAST consists of analyzing one's data every time a predetermined number of participants are added to the sample until the *p*-value crosses a lower or upper threshold. Frick (1998) determined that the thresholds of .01 and .36 optimized power and kept the false positive rate under 5%. Therefore, the preregistered plan was to analyze the data for every 50 participants after the initial sample size of 300 and stop data collection if the key *p*-value was below .01 or above .36. If a value below .01 was found, then the null hypothesis would be rejected and data collection would stop. If a value above .36 was found, data collection would stop and the null would not be rejected.

Due to limited resources for data collection, no more than 500 participants would complete the study.

The achieved sample size was 314 (slightly more than the preregistered sample size due to fewer exclusions than anticipated). Data were collected from online workers on the Prolific platform most of whom were female (51%) and White (63%; Asian: 13%; Hispanic: 8%; Black: 7%). Seventeen participants were excluded for providing incomplete data or reporting that they did not pay attention to the tasks.

Measures and Procedure. The measures and procedure were similar to those of Studies 1 and 2. The key differences were the situation used to manipulate the presence of situational groups and that political affiliation and sex were crossed with situational groups. Participants were told that the targets they would see were eight workers at a town hall discussing whether to schedule an event at an art fair or at a music festival (see Appendix C). In the situational-groups-present conditions, half the targets made statements in favor of the art fair while the other half argued for the music festival. In the situational-groups-absent conditions, all of the targets expressed ambivalence toward both places (see Appendix D). To manipulate the targets' political affiliations, half of the targets wore red caps with "Make America Great Again" written on them while the other half wore blue caps with "Make America Democratic Again" written on them. In the sex conditions, all of the targets did not wear caps.

Results

The same analyses as in previous studies were performed in this study. If the hypothesis is correct, there should be a significant two-way interaction between the two manipulations such that the effect of situational groups should be larger for political affiliation categorization than sex categorization. However, there was no evidence of an interaction, $F(1, 310) = 0.00$, $p = .960$,

$\eta_p^2 < .01$. There were main effects of situational groups – introducing situational groups reduced sex/political categorization, $F(1, 310) = 6.08$, $p = .014$, $\eta_p^2 = .02$ – and target demographic manipulation – sex categorization was stronger than political affiliation categorization, $F(1, 310) = 12.89$, $p < .001$, $\eta_p^2 = .04$ (see Figure 7).

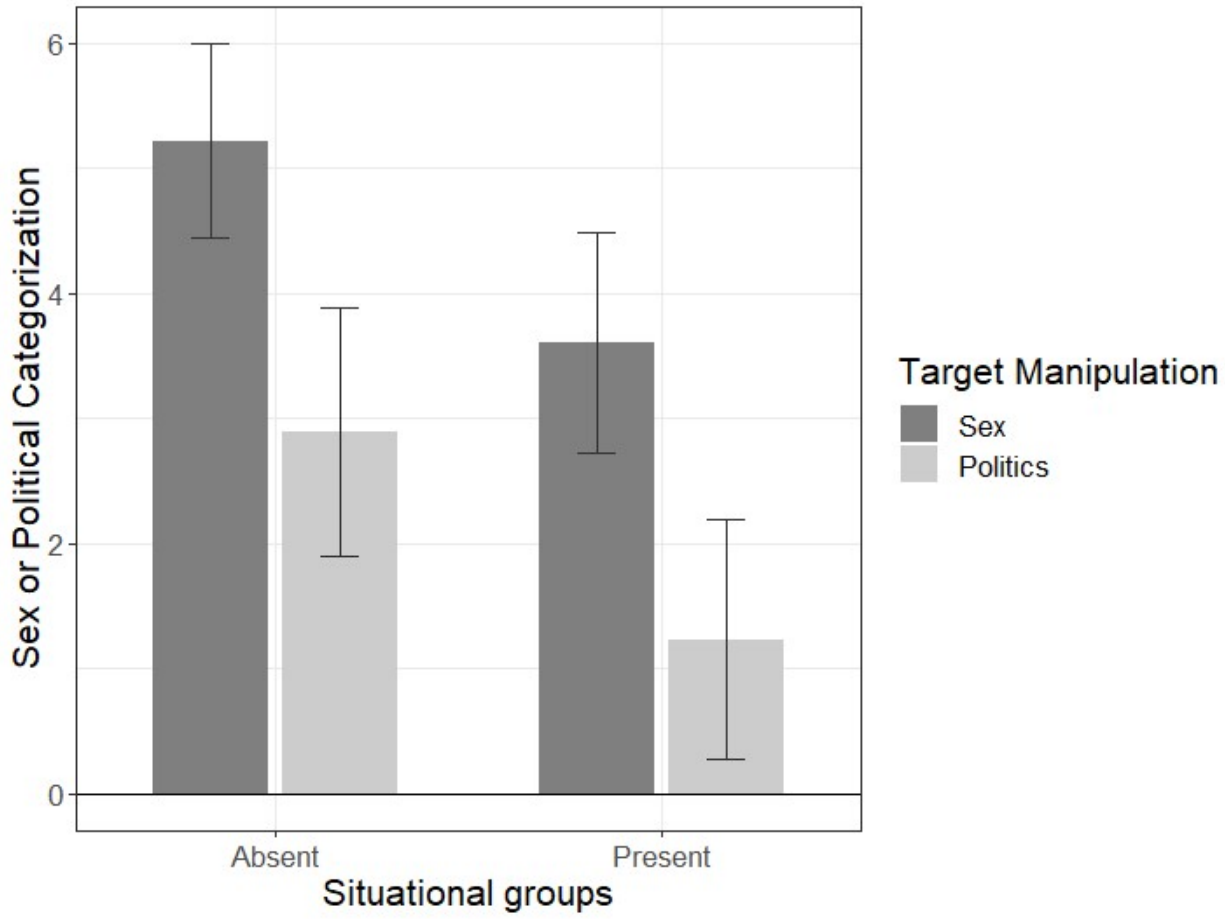

Figure 7. Study 3: Political Affiliation/Sex Categorization in Each Condition

Note. Error bars are 95% CIs.

As in the previous studies, situational-group categorization only happened in the situational-groups-present conditions, $F(1, 310) = 57.80$, $p < .001$, $\eta_p^2 = .16$. However, there was also a significant interaction between the situational groups manipulation and the target demographic manipulation on situational-group categorization, $F(1, 310) = 12.15$, $p = .001$, $\eta_p^2 = .04$. The simple slopes revealed that, in the situational-groups-present condition, situational-

group categorization was higher for the sex condition than the political affiliation condition, $t(152) = 3.42$, $p = .001$, $\eta_p^2 = .07$. In the situational-groups-absent condition, there was no difference between the sex and political affiliation condition, $t(158) = 1.15$, $p = .250$, $\eta_p^2 = .01$ (see Figure 8).

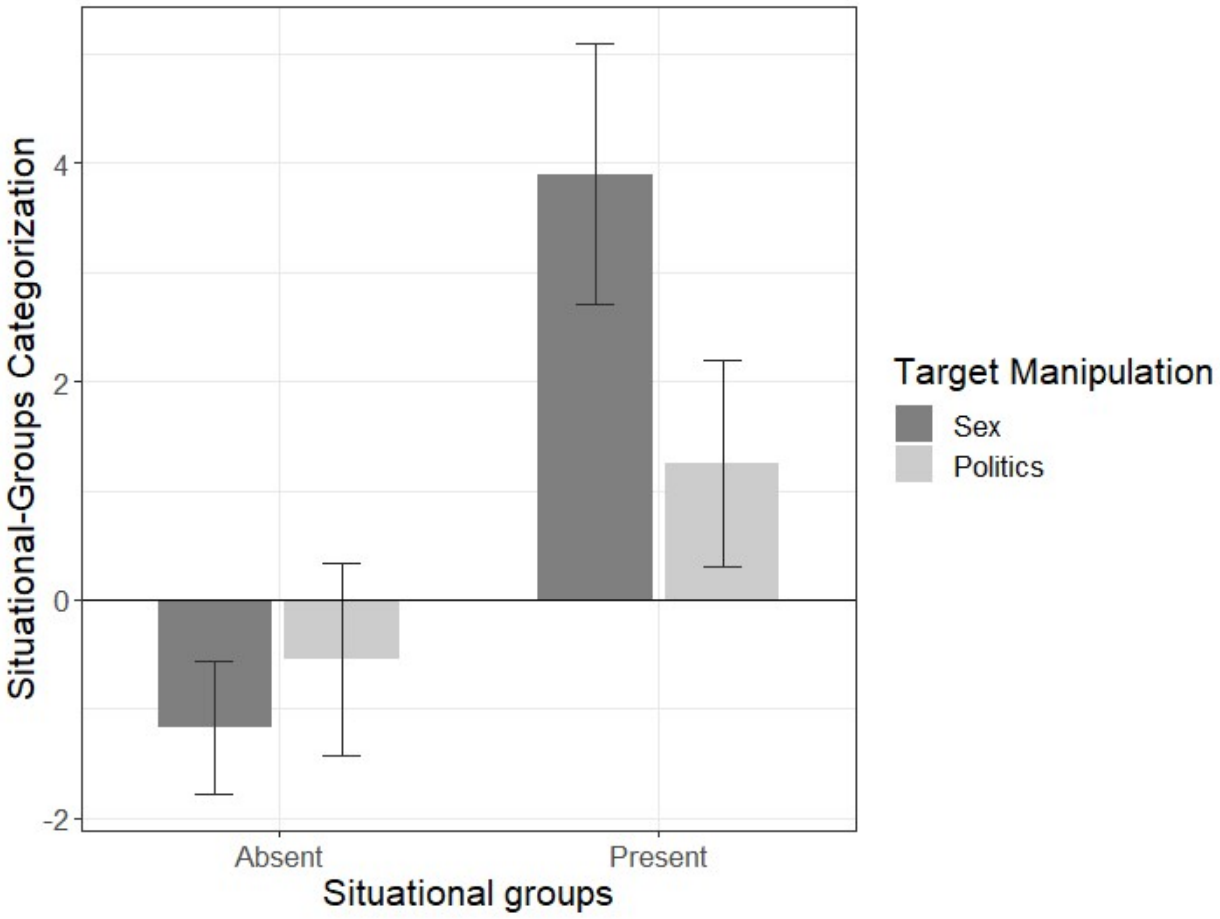

Figure 8. Study 3: Situational-Groups Categorization in Each Condition

Note. Error bars are 95% CIs.

Discussion

This study tested the hypothesis in a new situation and crossed situational groups with a new coalition: political affiliation. As in the first two studies, introducing situational groups reduced categorization in terms of an alternative coalitional dimension, albeit slightly. However, sex categorization was reduced to a similar degree. If the hypothesis were true, then one would

expect categorization in terms of political affiliation to have been more affected by the introduction of situational groups than categorization in terms of sex. Therefore, this study did not find supportive evidence for the idea that situational groups are processed as coalitions.

Additionally, this study found an effect not seen in previous studies: categorization in terms of situational groups seemed to be impacted by the presence of political affiliation cues. Specifically, when situational groups were present, categorization in terms of situational groups was weaker in the political affiliation condition than the sex condition. One potential explanation for this effect is that people could not "get over" seeing political affiliation as a relevant coalitional cue even though the discussion in the situation was orthogonal to the individuals' political affiliations. Because both political affiliation and the situational groups could have, in the participants' minds, been relevant coalitions to track, they may have ended up splitting their attention to both types of cues. The consequence of that would be that categorization in terms of political affiliation and situational groups would both be reduced, which is what the results indicate happened.

General Discussion

According to evolutionary theories of our coalitional psychology, interdependence between individuals is the main ingredient for coalitions to emerge. To successfully navigate social interactions, people need to determine who belongs to which coalitions. If in order to do that people encode information about other individuals' goals, then they should track coalitions even if they are restricted to particular situations (i.e. situational groups).

The studies described above tested whether situational groups are processed as coalitions. If that were the case, we would have seen that crossing situational groups with another coalitional dimension (race or political affiliation) would reduce categorization in terms of that dimension but would not affect categorization in terms of a non-coalitional dimension (sex or age). However, the results did not consistently support that hypothesis. Rather, only Study 1 showed some evidence (a marginally significant effect) for the hypothesis. Studies 2 and 3 showed no evidence for the hypothesis – the key effect was nonsignificant and extremely close to zero in both studies. Taken as a whole, the studies suggest situational groups are not processed as coalitions.

Surprisingly, in Studies 2 and 3, introducing situational groups significantly reduced categorization in terms of the non-coalitional dimensions of sex and age – something that one would not necessarily expect given that sex and age are "primary" categories. However, examining the sizes of these effects and comparing them to other studies crossing sex and age with other categories, it is clear the reductions found here are small and consistent with previous studies. Sex and age still seem to be primary in the sense that categorization in terms of those dimensions remains extremely high even if it is slightly affected by contextual manipulations. The sizes of the categorization effects remain close to $r = .70$ in all conditions, similar to the

effect sizes Kurzban and Pietraszewski report. Therefore, it is likely that the significant reductions found here are due merely to the larger sample sizes of these studies rather than a noteworthy effect of situational groups.

Regardless of the results, the studies do have some limitations that may qualify the conclusions. One limitation is the extent to which the results generalize to categorization "in the real-world." In all the studies, participants were well aware that they were participating in research which may have altered the way in which participants observed the individuals. When interacting with others in naturalistic contexts people may rely on different mechanisms to understand the patterns of interdependence around them. Future research will have to address whether that is or is not the case.

Additionally, while the studies' sample sizes were based on effects encountered in previous research and an attempt was made to conducted high-powered studies, the uncertainty in the effect estimates (i.e., the width of the confidence intervals) indicates that the studies may have been underpowered to detect smaller but potentially informative interaction effects. Studies to come should be conducted with larger sample sizes or more precise measurements of categorization so as to increase power.

An important caveat to make regarding these studies and other research using a similar paradigm is that it is possible (and in some cases likely) that sex and age are seen as coalitional dimensions. Specifically, when sex or age are not orthogonal to conflicts, they may be used as indicators of coalitional membership. Although the studies reported here suggest that for that to happen the conflict must not be constrained to a specific situation.

A notable result from Study 3 was that categorization of situational groups was lower in the political affiliation condition than in the sex condition. Comparing the average situational-

group categorization for the sex condition in Study 3 to that of Study 1 (and the situational categorization for the race and ages conditions across studies) would suggest that the notable effect in Study 3 may have been at least partially driven by a larger average in the sex condition rather than a lower average in the political affiliation condition. The average situational categorization in the political affiliation condition is more in line with the averages in previous studies (for race, age, and sex conditions), although it is still lower than would be expected. Unfortunately, the uncertainty in the estimates does not allow any definitive conclusions regarding that effect. Nevertheless, future research may consider why political affiliation could interfere with categorization of situational groups if the latter do not have the same coalitional nature as race and political affiliation (Kurzban et al., 2001; Pietraszewski et al., 2015).

As noted above, the main result of the present research seems to be that situational groups are not categorized as coalitions. This result is consistent with several different theoretical views. Firstly, it suggests that not all patterns of cooperation and competition are processed as coalitional. Even though evolutionary theory suggests that interdependence is the crucial ingredient for coalitions, it would seem like indicators of interdependence that are constrained to specific situations are not processed in the same way as indicators of interdependence that are cross-situational (e.g. race, politics). This does not necessarily invalidate that evolutionary theory; rather, it may add some nuance to it. While we certainly do track interdependence within situations (as shown by the situational-groups categorization effects), the mechanisms we use to do that may be the result of different selection pressures than the mechanisms to track coalitions that persist across situations. Notably, situational interdependence is intrinsically short-lasting, so it is plausible that the attentional and memory processes used in dealing with that kind of interdependence are tuned to accurately detecting change and efficiently updating information in

memory. In contrast, tracking interdependence that cuts across situations may rely on a distinct set of memory and attention processes that largely do not interact with processes for tracking situational interdependence. Given that indicators of race, employment, and political affiliation signal relatively stable interdependence structures, they may rely on similar memory and attention processes. Thus, when confronted with different dimensions of stable interdependence (e.g., race and political affiliation) those dimensions may compete for the same memory or attentional resources, causing reductions in categorization in terms of some of the dimensions (Pietraszewski et al., 2015). However, if situational interdependence is tracked using different processes, then situational categorization may not compete with categorization in terms of other coalitional dimensions more so than it does with non-coalitional dimensions like sex or age. Therefore, even though interdependence is a crucial component of both types of categorization (situational and cross-situational), in our minds, the only "true" coalitions may be those that are cross-situational.

The idea that situational groups are less coalitional is also consistent with the view that groups are perceived in so far as they are highly entitative. Findings from the entitativity literature suggest that collections of individuals are not seen as groups if they are transitory or based on loose associations (e.g., people standing at a bus stop). Rather, highly entitative groups are those in which individuals share goals and outcomes, identify with group membership, interact frequently, and are not highly permeable (i.e., groups that cannot be left or joined easily) (Lickel et al., 2000). Relatedly, Sherman et al. (2002) reported experiments with a memory paradigm similar to the who-said-what task showing that people confused individuals from groups with similar levels of entitativity more so than they confused individuals from different

levels of entitativity. Future research can further explore the role of entitativity in our coalitional psychology and identify what drives change in perceived entitativity.

To conclude, the present studies found that categorization of individuals in terms of their goals within a situation (i.e., their situational groups) does not interfere with categorization in terms of cross-situational coalitions (e.g., race and political affiliation). This suggests that the interdependence within situations is not the same, in peoples' minds, as the interdependence across more long-lasting groups. Therefore, the essence of what is considered to be a group may not lie merely in the current situational relationships between individuals but also in the prospects of interdependence in future situations.

APPENDICES

APPENDIX A

Description of the Situation in the WSW Task for Studies 1 and 2

Recently, eight alumni from a local university were trying to plan a reunion. They had all graduated from the culinary sciences program at their university and now worked in different sectors of the food industry. Their jobs were demanding, and they could rarely find the time to get together as often as they had done so during college. After weeks of back-and-forth, they finally agreed on a time when everyone was free. Keeping with their tradition, they decided to meet at Jake's house an hour before dinner time.

Everyone arrived on time, and after a few minutes of conversation they began to discuss what they would do for dinner. As frequently happens to graduates from the culinary sciences program, they felt strongly about whether to go to a restaurant or to cook dinner themselves.

In the following pages, you will see a portion of their discussion. We are interested in the impression that these individuals make on you as they argue. You will see their photographs paired with what they said. Pay attention to their photos and statements because you will be asked to give your impressions of them after you are done.

The photos and statements you see will advance automatically, without you having to press anything. Click the "next" button to move to the next page.

APPENDIX B

Statements in the WSW Task for Studies 1 and 2

Situational-Groups Present Condition

1. I just cooked last night for my wife's co-workers. I don't really feel like doing it again today. Besides, there are a ton of great places nearby.
2. Come on, let's make a three-course meal, just like old times. We should have something to work with in the pantry. You can take care of the easy stuff.
3. Well, there is this gastro-pub on ninth avenue I've been meaning to try out. It's been a few weeks now that I've been trying to go, and something always seems to come up.
4. There is no parking on ninth, though. We'd have to take an Uber and I bet the price is surging right now. I know this new dish, it's really good – let's cook it!
5. I don't know, man. It'll be such a hassle. Who wants to do the dishes and clean-up? Plus, we'll all be exhausted, and I want to chill and catch up with you guys.
6. But we won't be able to talk to each other at a restaurant. It's always too loud, and we end up only talking to who's sitting close to us. Let's just make something convenient here.
7. This is my day off from work. Why don't we check out some reviews on Yelp? I'm sure there's a quieter place we can eat and have a few drinks.
8. I would be down for cooking together. We can split the work. It should take about the same amount of time as going out to eat and we'll save the money.
9. Some of us are single now, and that place is great for meeting people. Let's not just stay here. And the food there isn't that expensive, too.
10. I'm checking the weather forecast. We'll have four inches of snow by the time we head back. I really don't want to drag my car through that.
11. I'm sure it'll be fine. If we stay and cook, we'll end up eating way too much and spend the night watching TV. I rather go out.
12. That doesn't sound bad at all, man. And it's game night. That place with the drinks doesn't even have a TV. I vote on making that that fancy new dish he's talking about.
13. You know, for certified chefs, we don't always get our dishes right. Remember last time you wanted to show us a new dish? At least the restaurant will bring you something else if they screw up.
14. Hey, I trust our skills, and we'll be more careful. And honestly, I'd be more at ease if I were close to a computer. My boss said he would send me an email tonight, and I want to answer him right away so I make a good impression.
15. Man, give it a break, it's not business hours anymore. He won't care if you answer tomorrow morning. Let's go somewhere and have fun!
16. But taking two cars somewhere will be such a pain. Also, are you volunteering to be a designated driver? We can just drink and have fun here, then crash on the couch.
17. Well what about that place down the street? No one needs to be a designated driver, we can all walk over there right now and come back to crash on the couch later.

18. I don't feel like going outside in this weather. The sidewalk is going to be really slippery and I know you'll all be pretty drunk.
19. As if you didn't plan on having a few drinks. It's happy hour at that place they were talking about. We'll spilt an Uber, it won't be that expensive.
20. There's no way we'll get a table for all of us without a reservation. And I'm not too keen on sitting at the bar. I was looking forward to sharing a nice homemade meal with you guys.
21. We can still do that. There are plenty of places that won't be full and that have nice meals. What kind of food were you guys thinking of having?
22. I'm in the mood for fusion cuisine and there probably aren't places like that nearby. We can easily just make it with what we have here, though.
23. I feel really bad eating all of the food here. You know we'd end up eating everything in the pantry. Let's just go out.
24. It really wouldn't be that bad. I think we'd have more fun cooking and playing some boardgames here. Plus, I'd rather cook and clean here than deal with going to a restaurant.

Situational-Groups Absent Condition

1. I just cooked last night for my wife's co-workers. I'm a bit tired of cooking, but I'd be willing to do it again today. It's been a while since we all cooked together.
2. There are plenty of good places nearby. But we could make a three-course meal, just like old times. We should have enough to work with in the pantry.
3. Well, there is this gastro-pub on ninth avenue I've been meaning to try out. If we cook here, we can split the tasks, so you take care of the easy stuff.
4. There is no parking on ninth, though. We'd have to take an Uber and I bet the price is surging right now. We can go somewhere else or I can cook this new recipe I learned.
5. I do want to relax and catch up with you guys. It might be better to stick around. But it'll be a hassle to cook. Who wants to do the dishes and clean-up?
6. We might not be able to talk to each other at a restaurant. We'd have to pick somewhere that isn't too loud and that has large tables.
7. Why don't we check out some reviews on Yelp? I'm sure there's a quieter place we can eat and have a few drinks. If we don't find anything, we'll just stay here.
8. I would be down for cooking together. We can split the work. Although it might take a bit more time than ordering food at a restaurant.
9. We would spend more money if we went to a restaurant, but that place you were talking about is great for meeting people and most of us are still single, you know?
10. The weather forecast says we'll have four inches of snow by the time we head back. I really don't want to drag my car through that. If we go, can we take someone else's car?
11. I'd be okay with driving somewhere. If we stay and cook, we'll end up eating way too much and spend the night watching TV. Which might not be the worst thing.

12. That doesn't sound bad at all, man. And it's game night. Whether we stay here or go, let's just make sure there's a nice big TV so we can watch the game.
13. You know, for certified chefs, we don't always get our dishes right. Remember last time you wanted to show us a new dish? I'm just kidding, you are all amazing cooks.
14. I'd be more at ease if I were somewhere with reliable wifi. My new boss said he would send me an email tonight, and I want to answer him right away, so I can make a good impression.
15. Man, give it a break, it's not business hours anymore. He won't care if you answer tomorrow morning. Let's forget work a bit and have fun!
16. We'll have to take two cars if we go and that will be such a pain. Are you volunteering to be a designated driver? Let's drink here or go somewhere within walking distance.
17. Well what about that place at the corner? No one needs to be a designated driver – we can cook here or eat at that place.
18. The sidewalk is going to be slippery and I know you'll all be pretty drunk. So, if we go out, let's make sure we come back before the weather gets really bad.
19. It's happy hour at that place they were talking about. We could split an Uber. Although I would end up spending a bit more money than I had planned to.
20. There's no way we'll get a table for all of us without a reservation. And I'm not too keen on sitting at the bar. Maybe we can skip the happy hour drinks? I wanted to share a nice meal with you guys wherever we decide to go.
21. There are plenty of places that won't be full and that have nice meals. Or we could just stay here and cook that fancy new dish you were talking about.
22. What was the dish again? I'm in the mood for fusion cuisine. We can easily just make it with what we have here, or we could go to this other place I know.
23. I feel bad about eating all of the food here. You know we'd end up eating everything in the pantry. If we cook, let's buy a few ingredients from the supermarket.
24. It really wouldn't be that bad. I think we'd have fun cooking and playing some boardgames here. Oh, there's that restaurant with boardgames downtown. What kind of food does it have?

APPENDIX C

Description of the Situation in the WSW Task for Study 3

Eight residents of a small town in the Midwest were gathered at the town hall to discuss their plans for the community. The individuals were all part of the town hall's newly formed committee for town safety and, as a brand-new committee, they felt they should have an inaugural event for all committees to attend. During their meeting, they brainstormed a few ideas and settled on two possibilities: either attending a local art fair or a local music festival.

Unfortunately, the committee did not have enough funds to do both, and because the funds were taxpayer money, they felt they should thoroughly discuss how they would be spending them. Furthermore, the committee members had just come back from attending a day-long political event at the town square and were quite tired. Some of the individuals were republicans and some were democrats.

In the following pages, you will see a portion of the individuals' discussion. We are interested in the impression that these individuals make on you as they argue. You will see their photographs paired with what they said. Please pay attention to both their photos and statements.

The photos and statements you see will advance automatically, without you having to press anything. Click the "next" button to move to the next page.

APPENDIX D

Statements in the WSW Task for Study 3

Situational-Groups Present Condition

1. Ok, let's see if we can make a quick decision here. I think we should go to the music festival, not the art fair.
2. Well, I don't know, the music festival wasn't that great last time I went.
3. The program looks really good this time. The main band is pretty popular.
4. I've seen them before; they're definitely overrated. Going there not be a good idea for this event.
5. They won't be the only ones presenting, though. The other bands might be better.
6. No, I vote going to the art fair, too. Music festivals can be pretty expensive, and we don't have that much money.
7. But we'll probably be able to get a discount since we're going with a large group of people.
8. I wouldn't bet on it. Last time I tried doing that they didn't like the idea. The art fair is the better choice here.
9. But the art fair can be so boring sometimes. I feel like more people will enjoy the music festival.
10. Not necessarily, we have a lot of art fans in the committees.
11. The art fair is kind of out of the way, though. The music festival would be nearer to the town hall.
12. We could just rent a bus since the art fair is less expensive. I think it'd be more fun to go there.
13. No way, renting a bus sounds like too much work. The music festival will be awesome, I vote we go there.
14. Well, I personally prefer the art fair. That way everyone can take their families, too.
15. I thought only committee members were going. I think we'd enjoy the music festival more if we weren't taking our families.
16. I personally don't care if we bring more people, but the art fair is close to a great restaurant we could go to after.
17. The music festival has great food. We can also stay there after the show – that would be a good time!
18. Nah, the art fair sounds way more interesting. And I feel like we never go there.
19. That's true, but the music festival is really fun. We can go to the art fair some other time.
20. The music festival is fine, but the audience can be so obnoxious sometimes. Let's just go to the art fair.
21. I think going to the art fair is kind of obnoxious haha. I also think we could go there some other time.
22. We're not making any progress on this. Why don't we just vote? I vote on going to the art fair.

23. I vote on the music festival. They have a great selection of drinks and we could stay there after the show.
24. The art fair is more convenient – I vote we go there. The music festival is kind of hit or miss.

Situational-Groups Absent Condition

1. Ok, let's see if we can make a quick decision here. I think both the music festival and the art fair are good options, but we have to pick one.
2. Yeah, either are fine by me. I've gone to both before and enjoyed them.
3. The art fair program looks really good this time. But the main band at the music festival is really popular, so I'm not sure.
4. I've seen them before; they are overrated, but the art fair doesn't seem that good to me, too.
5. They won't be the only ones presenting though, the other bands might be better. We could just go to the art fair, though.
6. Music festivals can be pretty expensive, but we do have more money available this year for events, right?
7. We'll probably be able to get a discount at either of them since we're going with a large group of people.
8. I wouldn't bet on it. Last time I tried doing that both the art fair organizers and music festival organizers didn't like the idea.
9. They both sound like great options. Where did the committees end up going last time?
10. I don't remember, but we do have a lot of art fans in the committees. Although, they'll probably enjoy doing something different, too.
11. The art fair is kind of out of the way, though. I think the music festival would be nearer to the town hall, right?
12. No, they're about the same distance from here. We could just rent a bus to whichever one we go.
13. Renting a bus sounds like too much work. I think people wouldn't mind meeting here and carpooling.
14. Are we bringing family members, too? We might want to go to the more kids-friendly place.
15. I don't know, I think we'd enjoy it more if we didn't take our families. Neither of them are that kids-friendly, to be honest.
16. I personally don't care if we bring more people, we probably want to pick one that is close to a restaurant.
17. The music festival has great food, but the art fair is close to a bunch of nice restaurants.
18. That's great. It'll be nice to get some food after. Either place is fine by me.
19. Are we sure that the music festival audience won't be too rowdy this time? I've heard people had bad experiences there.

20. Yeah, I'm sure it'll be fine. Also, the art fair is sometimes pretty crazy if that's what you're worried about.
21. It'll be fine. I go to both every year and have never had a bad experience.
22. That's all great, but we're not making any progress on this. Why don't we just vote? Let's start with you, where do you want to go?
23. I don't know! They both sound so fun. Can I abstain from voting?
24. Yeah, it's up to you guys. I'd be down to go to either.

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