

Racial and Ethnic Status Distinctions and Discrimination: The Effects of Prior Contact and Group Interaction



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Although racial and ethnic inequalities are consistently reproduced on both macro and micro levels, intergroup contact theory (ICT) and status characteristics and expectation states theory (SC-EST) identify opportunities for intervention. SC-EST most often limits its scope to examining deferential behavior and attitudes toward out-group members in specific interactions; ICT has a broader scope, including measures of attitudes, affect, and behavioral intentions toward out-group members. In two experiments with differing racial-ethnic compositions, we examine the effect of contact and the inconsistent complexity manipulation (from SC-EST) on attitudes and behavior toward specific out-group members within the working groups. We find that both intergroup contact and the inconsistent complexity intervention are effective at reducing some but not all forms of inequality. We discuss the potential for future integrations of the two theories.

Keywords: contact, status characteristics and expectation states, race-ethnicity, experiments, behavior

One of the most important and virulent status distinctions is race-ethnicity. Even the terms *race* or *ethnicity* suggest domination, because we know the terms were, and are, used to create separation and often justification for beliefs about competence and skill (Feagin and Ducey 2019; AAA 1998). Although some, and perhaps

most, contexts enable the reproduction of status hierarchies based on race-ethnicity; under some conditions, status hierarchies can be interrupted (Markovsky, Smith, and Berger 1984; Berger and Webster 2006), and prejudice reduced (Dovidio et al. 2017; Paluck et al. 2021). In this article, we consider two theoretical ap-

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proaches to understanding racial-ethnic inequality and the potential ways to decrease it: status characteristics and expectation states theory and intergroup contact theory.

Status characteristics and expectation states theory describes one way in which racial-ethnic inequality is reflected and reinforced in small group interactions. Specifically, SC-EST predicts that—without an intervention—those with higher status (such as White people in the United States) will have greater influence than those with lesser status (such as people of color in the United States). Within the SC-EST framework, several interventions have been investigated. We investigate one intervention, the inconsistent complexity (IC) manipulation (Goar and Sell 2005; Manago, Sell, and Goar 2019), which emphasizes how the definition of the group task can modify intergroup inequality.

Intergroup contact theory describes how stereotyping and discrimination can be reduced through contact between individuals of different social groups, such as people of different races or ethnicities. Specifically, ICT predicts that under certain conditions, interaction with out-group members decreases discrimination and prejudice toward other out-group members.

Despite considerable research in each of these approaches to decreasing stereotyping and subsequent behavior, few studies bring them together. We examine how both the inconsistent complexity intervention (from SC-EST) and prior contact (from ICT) affect prejudicial attitudes and discriminatory behavior. We test our conjectures with small task-oriented groups with two different compositions: Black and White participants in the Midwest and Mexican American and White participants in the Southwest.¹

We find some support for both SC-EST and ICT. A novel contribution of this article is the bridging of ICT and SC-EST to examine whether prior interracial or interethnic contact could affect perceptions of competence and deferential behavior. We find that although prior contact improved affective prejudice (intergroup anxiety), it did not affect cognitive prejudice (per-

ceptions of competence and deferential behavior). We discuss the implications of these findings for understanding how status works in groups.

STATUS CHARACTERISTICS AND EXPECTATION STATES THEORY

Studies show that, in mixed-race task groups, White participants talked more, were more likely to initiate interaction, exerted more influence, and were more favorably evaluated by other group members than Black participants were (Katz, Goldston, and Benjamin 1958; Cohen and Roper 1972). More recent research finds that White individuals are also perceived as more competent and held to more lenient standards than Black and Mexican American individuals (Biernat and Kobrynowicz 1997; Manago, Sell, and Goar 2019). One way to explain these inequalities is through status characteristics and expectation states theory.

SC-EST is a set of theories that examine inequalities within task-oriented social interactions. Simply put, the theories consider how small group interactions are affected by group members' status characteristics. More specifically, the theories provide insight into how structural inequalities create unequal interactions in smaller task-based groups during cooperative interactions in which people care about the successful performance of the group (Berger et al. 1977).

Status Characteristics

Status characteristics are attributes from which individuals form beliefs and expectations about a person's abilities and include characteristics such as gender, race, occupation, or age (Berger et al. 1977; Berger and Webster 2006; Berger, Rosenholtz, and Zelditch 1980). Status characteristics are one of two types, diffuse or specific. Diffuse status characteristics, such as race and gender, are characteristics associated with cultural beliefs (for example, stereotypes) about a broad range of abilities (Berger, Cohen, and Zelditch 1972; Correll and Ridgeway 2003; Berger and Webster 2006). Specific status characteristics refer to

1. We capitalize *White* in response to other scholars' requests to prevent whiteness from being invisible or considered somehow the default.

particular abilities used to infer performance for a specific type of task. For example, algebraic or verbal ability would be considered a particular task ability that would result in a specific status. When individuals are differentiated based on status characteristics, those with higher status have greater power and prestige within the group (Berger and Webster 2006). That is, all else equal, when status characteristics are differentiated, individuals of higher status (such as men or White people) are given, and take, more influence during interactions with those of lower status (such as women or Black people).

When specific status characteristics become salient, individuals use those characteristics as accurate and relevant indicators of abilities and performance and also generalize from these specific status characteristics to other task settings (Berger et al. 1977; Freese 1976). In the absence of specific information about individuals' abilities on a task, the burden of proof is placed on low-status individuals to prove their diffuse status is not relevant and demonstrate their abilities (Berger et al. 1977). The burden of proof process demonstrates how diffuse status characteristics, which are not initially relevant to the task, come to organize performance expectations and small group interactions. Specifically, the burden of proof process occurs in three steps: the recognition and differentiation of various status characteristics, an inference about general competence, and interactional behaviors that follow a status hierarchy. The process advantages high-status actors who are given greater opportunities to contribute to the task, have more influence, and are evaluated more positively (Berger et al. 1977).

Status Beliefs

The effect of individuals' status markers on group interactions occurs as a result of status beliefs (Correll and Ridgeway 2003). As Cecilia Ridgeway and Hazel Markus (2022, this issue) detail, cultural schemas based on historically contingent and changeable contexts dictate

status beliefs about categories of people. Both the societal and group context are important for the distribution of status. These status beliefs then affect the allocation of status based on perceived competence, which in turn enables the distribution of influence within groups, both large and small. Thus, in nearly all aspects of life, individuals' identities (such as gender and race) affect the way they are treated.

Status differences are neither stable nor natural. Instead, they develop through repeated social interactions that attach performance expectations to social categories.² One way status beliefs can develop is from initial conditions of unequal resources distributed among two or more nominal categories (Ridgeway 1991). These unequal conditions create an association between the resources and characteristics that, over time and with repeated interaction, inform performance expectations.

For example, because of a number of laws and policies enacted by White individuals to maintain positions of power (Delgado and Stefancic 2001), White Americans are more likely than Black Americans to have greater resources such as wealth, education, and employment (Killewald and Bryan 2018; Kozol 2005; Pager and Shepherd 2008; Quillian, Lee, and Honoré 2020). Similarly, and for the same reasons, compared to Mexican Americans, White Americans have higher employment rates (Pager, Western, and Bonikowski 2009), have better educational opportunities (Valencia and Black 2002; Lopez 2005), and are less likely to receive unjust treatment by police, prosecutors, and immigration authorities (Short and Magaña 2002; Esqueda, Espinoza, and Culhane 2008; Welch et al. 2011; Fussell 2014). Therefore, when individuals interact with Black, Mexican American, and White people, they are more likely to encounter White individuals who are more resourced than their Black and Mexican American counterparts. Belief systems regarding this relative disadvantage or advantage are developed and, over time, favorable expectations of White individuals (and less favorable expectations of

2. Of course, many other methods for measuring status do not depend on specific performance expectations (for discussion, see Valentino 2022, this issue; Maloney, Rogers, and Smith-Lovin 2022, this issue).

Black and Mexican American individuals) are stabilized.

Summary and Hypotheses

In summary, the burden of proof process enables status characteristics to organize behavior in small group interactions, with higher-status individuals having more influence than their lower-status counterparts. In our study, we examine race and ethnicity, which are considered diffuse status characteristics. Specifically, we consider interactions between Black and White and Mexican American and White individuals in small, task-oriented groups. At this point in the United States, White individuals are considered to be higher status than Black and Mexican American individuals. To further meet the scope conditions of SC-EST, we consider groups whose members are interdependent and cooperating to achieve task success.

Prediction A: If there is no intervention, race-ethnicity will act as a diffuse status characteristic.

H1a: Without an intervention, White participants will view Black and Mexican American group members as less competent than other White group members.

H2a: Without an intervention, Black and Mexican American participants will view themselves as less competent than White group members.

H3a: Without an intervention, Black and Mexican American group members will be less influential than White group members.

INTERVENING IN PROCESSES OF PREJUDICE AND INEQUALITY

Because nothing is desirable about status hierarchies based on irrelevant characteristics such as race, researchers have sought interventions that can disrupt status processes. We examine two kinds of interventions, one from SC-EST and another from ICT.

Inconsistent Complexity Intervention

The first intervention we consider is the inconsistent complexity intervention, which interrupts status-generalizing processes. As de-

scribed earlier, the status-generalizing process, as described by SC-EST, demonstrates how group members use information about each other and about the task to allocate influence in group interactions. For example, if group members know only each other's diffuse status characteristics, then diffuse status characteristics will organize group interaction. Thus, if group members are not told otherwise, the burden of proof process enables a generalization from the diffuse status characteristics to perceived competence (Berger et al. 1977; Goar and Sell 2005).

The inconsistent complexity intervention builds on the work of Elizabeth Cohen (1982, 1993; Cohen and Lotan 1997) and Hamit Fişek (1991). Specifically, by causing group members to consider how different people might have different skills, Cohen and Fişek posit that different types of tasks could interrupt the burden of proof process and status inequality. Carla Goar and Jane Sell (2005) modify the formulation in several ways; in particular, by considering the definition of the task rather than the task itself. Specifically, by defining the tasks as requiring many kinds of abilities, the intervention challenges narrow definitions of competence. If tasks are composed of many components and those components are not necessarily consistent in evaluation (that is, not all high or all low in evaluation) or even related to each other, then overall labels such as smart or competent do not apply. Therefore, by defining the task as requiring many different abilities, group members are more likely to listen to each other thereby increasing opportunities for participation from all group members (for a graph theoretical explanation before intervention, see the appendix).

The inconsistent complexity intervention has been effective in two studies involving race. In the first, when tasks were defined as requiring multiple skills that might not be related to each other, interaction between Black and White group members was more equitable (Goar and Sell 2005). In the second, we (Manago, Sell, and Goar 2019) examined the effectiveness of the inconsistent complexity intervention over a three-week period in groups of Mexican American and White par-

ticipants. Each week, the groups worked on a different task. Although some tasks demonstrated stronger effects than others, the researchers found that the intervention can be sustained over time (Manago, Sell, and Goar 2019).³

Summary and Hypotheses

Although higher-status individuals are perceived to be more competent and have more influence than their lower-status counterparts, these status positions are not fixed. Instead, we posit that the inconsistent complexity intervention can decrease status differentials in small, interdependent, task-oriented groups. Therefore, we predict:

Prediction B: Given the inconsistent complexity intervention, race-ethnicity will not act as a diffuse status characteristic.

H1b: With an intervention, White participants will not view Black and Mexican American group members as less competent than other White group members.

H2b: With an intervention, Black and Mexican American group members will not view themselves as less competent than their White group members.

H3b: With an intervention, Black and Mexican American group members will not be less influential than White group members.

Intergroup Contact Theory

The second intervention is intergroup contact, which includes interactions (broadly defined) with people who differ from oneself in terms of race-ethnicity, religion, and so on (Pettigrew et al. 2011). Several studies and meta-analyses confirm the general result that those individuals with more intergroup contact demonstrate less prejudice. Although *prejudice* is broadly defined and measured (Lolliot et al. 2015), contact is consistently associated with decreased prejudice. For example, contact has been shown to

decrease negative attitudes (such as stereotypes), affect (such as fear, anger, disgust), and behavioral intentions or actual behavior (such as avoidance, desired social distance; Zhou et al. 2019; Stephan 2014).

Despite considerable research showing an association between contact and discrimination, some researchers criticize the contact literature for the lack of studies that measure actual (versus intended) behavior (Beelmann and Heinemann 2014) and that use random assignment (Paluck and Green 2009; Paluck et al. 2021). The lack of behavioral research and random assignment poses challenges for evaluating the causal effect of contact. For example, some recent field experiments in which participants were randomly assigned to different team compositions demonstrated effects for some—but not all—attitudinal and behavioral measures of prejudice and discrimination measures (Mousa 2020; Scacco and Warren 2018). In particular, behavioral measures showed stronger effects than attitudinal measures.⁴

Cognitive Stereotypes

Despite these concerns, there is considerable research that supports the association between contact and (lower) prejudice (Kotzur and Wagner 2021; Pettigrew et al. 2011; Pettigrew and Tropp 2006). Further, this research uses multiple measures of prejudice and discrimination—including a wide variety of stereotypes. Prior contact is consistently associated with decreased negative and increased positive stereotypes. Competence is a fundamental dimension of stereotypes, meaning that all other stereotypes are influenced by perceptions of competence (along with warmth) (Fiske et al. 2002; Brambilla, Ravenna, and Hewstone 2012). In addition to being a fundamental stereotype, competence is also thought to be associated with deference. Specifically, and as noted by SC-EST, individuals tend to defer to those whom they perceive to be more competent.

3. Some of the deference results in the White and Mexican American groups we report in this article also appear in an earlier article (see Manago et al. 2019).

4. Some studies do not find the predicted effects of contact, which suggests that different groups (such as forced migrants) might require different approaches (see Kotzur and Wagner 2021).

Generalizability of Contact

When considering the effect of contact on prejudice, researchers have sought to examine whether contact generalizes. That is, are interactions with a specific out-group member viewed as separate from the rest of the out-group, or does generalization from contact extend to the out-group in general? Research indicates that generalization does occur, not only beyond specific individuals, but also beyond specific out-groups. For example, friendship with an out-group member, the most intimate and effectual form of contact, appears to reduce prejudice not only toward that person and other members of that person's out-group, but also to members of different out-groups (Pettigrew 2008; Laar et al. 2005; Pettigrew 1997).

ICT research typically focuses on how contact with specific out-group members generalizes to an entire out-group. In this study, we ask whether attitudes toward out-group members as a whole can also generalize to specific out-group members in groups that are assigned rather than chosen by group members. Our interest in this question stems from research which consistently finds that small group interactions can reflect, reinforce, or challenge larger structural inequalities (Benard et al. 2022; Berger and Webster 2018; Ridgeway 2019; Ridgeway and Markus 2022, this issue). We posit that if small group interactions are microcosms of structural processes, and contact reduces prejudice toward an out-group as a whole, then contact should also decrease prejudice toward specific members of that out-group.⁵

Summary and Hypotheses

Contact is associated with more positive stereotypes of out-group members. Competence is a fundamental dimension of stereotypes and is also associated with deferential behavior. Contact is thought to generalize from specific individuals to broader out-group members. Research has not examined whether this process occurs in the other direction, but we suspect these may be parallel processes. Therefore, we predict:

5. We posit this should occur even in situations where individuals cannot choose those they are working with, as is the case with the groups we consider.

Prediction C: Greater frequency of past contact with out-groups will be related to more positive estimates of competence and increased deference to out-group members within the task groups.

H4a: For White participants, higher frequency of prior contact with out-group members (Black and Mexican American participants) will be associated with increased perceptions of competence of specific out-group members.

H4b: For White participants, higher frequency of prior contact with out-group members (Black and Mexican American participants) will be associated with increased deference toward specific out-group members.

Affective Stereotypes

In addition to improving cognitive stereotypes (such as perceptions of competence of out-group members), ICT emphasizes that past contact with out-group members is associated with improved affective attitudes toward out-group members. Two such measures of affective attitudes are willingness to interact with out-group members and negative emotion (specifically, in-group anxiety) toward out-group members.

Because contact has been shown to reduce prejudice toward out-group members, researchers are often interested in understanding ways to increase willingness for such contact (Zhou et al. 2019). Put differently, do people who are less prejudiced interact with people from other racial-ethnic groups more often, or does interacting with those from other groups lead to less prejudice? Studies indicate that both seem to be the case (Pettigrew et al. 2011). As an example, a particularly compelling, multicountry, longitudinal research project finds that existing contact leads to less prejudice, and less prejudice leads to a greater willingness for future contact (Binder et al. 2009).

Contact may reduce prejudice, at least in part, by decreasing intergroup anxiety, i.e., the negative emotion felt when anticipating future, or experiencing actual, encounters with out-

group members (Brown and Hewstone 2005; Stephan and Stephan 1985). When individuals have high intergroup anxiety associated with a specific out-group, they tend to hold more negative stereotypes of, have more negative affect toward, and desire more social distance from members of that out-group (Stephan 2014). Thus, contact is a well-established predictor of intergroup anxiety (Zhou et al. 2019; Pettigrew and Tropp 2008).

Summary and Hypotheses

Prior contact is associated with a greater willingness for future contact and lower intergroup anxiety. Lower intergroup anxiety is associated with a greater willingness for future contact. Therefore, we predict:

Prediction D: Past contact will predict intergroup anxiety and willingness for future interaction.

H5a: Past contact with out-group members will be associated with higher willingness to have future contact with specific out-group members within the group.

H5b: Past contact with out-group members will be associated with lower reported intergroup anxiety toward out-group members.

H5c: Intergroup anxiety will mediate the effect between past contact and willingness for future contact with specific out-group members within the group.

Although research suggests that intergroup anxiety will mediate the relationship between contact and willingness to interact in the future; we do not expect that intergroup anxiety will mediate the relationship between contact and competence. This is because, although intergroup anxiety may improve affective prejudice, such as willingness to interact, researchers do not suggest that intergroup anxiety will affect cognitive prejudice, such as stereotypes, to the same degree (Pettigrew et al. 2011, 203).

Discrimination by and Against Whom

Research in intergroup contact has primarily focused on decreasing prejudice of historically advantaged group members (those with more power) rather than historically excluded mem-

bers (those with less power). It may be that this stance was initially developed because researchers focused on decreasing discrimination from the more powerful toward those with less power. Status and discrimination processes, however, are created and recreated in interactions. For example, research suggests that not only do historically advantaged individuals view themselves as more competent than historically excluded individuals, but also that historically excluded individuals perceive themselves to be less competent than historically advantaged group members (Ridgeway 2019).

When research examines the effect of contact on prejudice for both advantaged and excluded groups, it finds that the effects for decreasing the prejudice toward historically disadvantaged groups are stronger than decreasing prejudice toward those who are historically advantaged (Tropp 2007; Tropp and Pettigrew 2005). Additionally, some research finds that intergroup anxiety does not mediate the relationship between contact and prejudice toward those who are historically advantaged. One potential reason for the weaker effect may be the valence of contact (Hayward et al. 2017).

Specifically, evidence indicates that it is not only the presence of contact but also the type of contact, positive or negative, that affects prejudicial attitudes (Hayward et al. 2017; Schäfer et al. 2021). Further, negative contact is weighted more heavily than positive intergroup contact (Barlow et al. 2012; Paolini et al. 2014; Pettigrew and Tropp 2008). Notably, members of both historically advantaged and excluded groups respond similarly both in terms of the high impact of negative contact and the general effect of the positive intergroup contact. It might be, however, that historically excluded group members have more negative contact with out-group members than their historically advantaged counterparts. Therefore, when examining the effect of contact on discrimination, we consider these processes separately for individuals of historically advantaged and excluded social groups.

METHODS

Because race is a status characteristic that spans multiple groups, we examine the pro-

cesses in two studies. One examines interactions between Black and White individuals in the Midwest and the other examines interactions between Mexican American and White individuals in the Southwest. Next, we describe the experimental procedures, which were designed to be consistent across the two locations and settings.

Sample

Participants were recruited from the student population at two large, public universities. To control for other status characteristics (such as gender and education) all participants were women and undergraduate students. Based on power analyses, we aimed for at least twenty-five groups per condition. Given the two conditions (experimental and control) and three participants per group, we recruited a minimum of 150 participants per experiment. Sign-up rates varied, leaving 180 participants in the Midwest (thirty groups per condition) and 150 participants in the Southwest (twenty-five groups per condition). Participants were assigned to groups of three based on individuals' reported availability (such as available to meet on Tuesdays). Each group consisted of two White participants and one participant who was either Black or Mexican American. Then, groups were randomly assigned to one of two conditions—experimental and control.

Design

Each study (Midwest and Southwest) consisted of three sessions, each separated by about a week. Participants worked in the same group on three different tasks that shared common features. Specifically, each task provided a vignette that described how the group had become stranded in a particular environment (session 1, on the moon; session 2, at sea; session 3, in the desert). Group members were then provided with a list of twelve to fifteen salvaged items that might aid in survival and asked to rank the items first as individuals and then as a group, from most to least important. Groups were also prompted to provide reasons for why each item was ranked as it was, thereby creating a high degree of group interaction.

The manipulation was implemented in the

first session (see procedure). Each session was jointly administered by two researchers, one of whom was White and the other who was either Black or Mexican American. The researchers were both active in their instructions to the group. In this manuscript, we consider only the last session, session 3. We examine session 3 because during this session, we also administered the questionnaires addressing contact, intergroup anxiety, and willingness to interact with the same group in the future. In the next section, we describe session 1 because it is when we administered the manipulation.

Procedure

Session 1 began with participants individually reading and signing consent forms in separate cubicles. Next, to ensure that participants were aware of their group members' race-ethnicity, we asked them to complete an information sheet about their group members. To assist in filling out the information sheet, participants were given a copy of the completed recruitment form for themselves and the other group members. The recruitment form contained a limited amount of information about each person, but included their racial-ethnic identity, their gender identity, and their name.

After completing the forms, participants watched an instructional video that described the study and included the experimental manipulation. After the recorded instructions, participants worked individually on each session's (survival) task for seven minutes in separate cubicles. At the end of the seven minutes a timer sounded, and at the direction of a researcher, the group was brought to a common table to work on the same task collectively. To control for any effects of table position on status, before the study began the researcher placed completed nametags on the table, thereby ensuring that the woman from the historically excluded group (either the Black or Mexican American group member) was always in the same position (at the right side of the table). Participants worked on the task collectively for twenty minutes and their interactions were recorded. At the end of the twenty minutes, a timer once again sounded. A researcher turned off the video camera and asked participants to fill out a questionnaire.

The questionnaire required participants to recall the instructions they had received, as well as indicate their estimations about the performance of individual members and the group (as a whole). After completing the questionnaire, participants were paid \$20 for their participation and scheduled for future sessions. Participants were told that at the end of the three sessions, their group could qualify in an additional cash bonus if their group performance was high. In fact, all groups received the same bonus.

Sessions 2 and 3 involved the same group members, working on similar tasks, first alone and then as a group. All sessions lasted between forty-five minutes and one hour. The only differences are that, unlike in session 1, participants in sessions 2 and 3 were not asked to complete a consent form again or rewatch the instructional video. Additionally, in session 3, participants were asked to complete additional questionnaires (which included our measures of contact, intergroup anxiety, and willingness for future interaction).

Experimental Manipulation

The experimental manipulation (independent variable) was the definition of the task, as described in the instructional video during session 1. The video also instantiated the scope conditions for SC-EST. That is, in all cases, the task was presented as a cooperative task and as one on which people did better when they worked together.⁶ A White female professor presented information to the participants. In all conditions, she described the tasks on which the participants would be working and told participants that the studies investigated how people made decisions under differing conditions. Additionally, groups in both conditions were briefed generally about teamwork, and told, “During the past several years, there have been many studies about how different people work together in groups. For many types of prob-

lems, the results have shown that individuals working together perform more effectively than individuals working alone. This is true for ALL three of the tasks that we will be asking you to work on.”

At this point, the instructions varied, depending upon whether the condition was the baseline condition or the experimental (inconsistent complexity) condition.

Groups in the baseline condition were told that some individuals perform better than others: “This task today and the other tasks you will work on during the second and third group meeting are similar: We DO know that some people do better at these tasks than other people. Even though some people do better while others do worse, we are trying to find out what makes some groups more successful than other groups at tasks like these.”

Later in the video these instructions were reinforced, with baseline groups told that “After the twenty minutes allotted for the group task has passed, we will give you a short questionnaire to fill out. This questionnaire will ask you to assess quality of the answers your group provided and more specifically the quality of answers offered by individual group members.”

Groups in the experimental condition received the inconsistent complexity intervention, which created a different definition of the task: “The task today and the other tasks you will work on during the second and third group meeting involves using MANY, MANY different skills and abilities. We know that, generally speaking, some group members will have some special skills and abilities and others will have other skills and abilities. So, although everybody will have some ability to contribute to the task, it would be extremely unusual or even impossible for a single individual to be good at every single aspect necessary for these tasks.”

These instructions were similarly reinforced later in the video, and experimental groups were told that “After the twenty minutes allot-

6. As a reviewer pointed out, these cooperative scope conditions of SC-EST have been shown to generally decrease inequality in groups. For instance, white-collar organizations that integrate interdependent values into norms and practices report higher levels of retention and belongingness from members who have working-class backgrounds (Stephens, Townsend, and Dittmann 2019; Dittmann, Stephens, and Townsend 2020; Hamedani and Markus 2019; Stephens, Markus, and Phillips 2014). Because this is the case, our tests of the intervention are conservative tests.

ted for the group task has passed, we will give you a short questionnaire to fill out. This questionnaire will ask you to assess the kinds of abilities you think are associated with success at the tasks and, more specifically, the abilities of the different group members.”

After receiving the intervention, only in the first week, participants filled out a questionnaire. This questionnaire was used to ensure the participants were paying attention to the instructions. In subsequent weeks, participants simply completed the task and filled out a questionnaire after the task. That is, the intervention occurred only in the first week.

Manipulation Checks

After the video in the first week, participants completed a questionnaire that asked about scope conditions. First, the questionnaires ensured that participants knew that group members had different racial or ethnic, but not gender, identities. If a single group member did not accurately assess the other group members’ race-ethnicity, the entire group was omitted from the final sample.⁷ Second, the questionnaires ensured that team members were task focused and group oriented. In the Black-White and Mexican American–White studies, 82 percent and 91 percent (respectively) of participants disagreed with the statement that “All answers are equally correct.” Respectively, 95 percent and 100 percent disagreed with the statement that “People do better on the task when they work only individually.” Participants thus overwhelmingly met the scope conditions.⁸

The questionnaires also evaluated the salience of the inconsistent complexity (experimental) manipulation. As would be expected, in both studies, those in the control condition were more likely than those in the exper-

imental condition to answer “true” to the statement, “Some people just seem to do better, overall, than others at the task” ($X^2_{B/W} = 60.543, p < 0.001$; $X^2_{MA/W} = 51.458, p < .001$). Similarly, as would be expected, in both studies, participants in the experimental condition were more likely than those in the control condition to answer “true” to the statement that “There are many different abilities and skills important for the task; nobody seems to be good at everything” ($X^2_{B/W} = 33.206, p < .001$; $X^2_{MA/W} = 28.57, p < .001$). Thus the manipulations appeared to work in both studies.⁹

MEASURES

The descriptive statistics for all dependent measures are presented in table 1. Although competence and deference were measured at all three time points, we examine only the third, because that is when the other variables were also collected.

Contact

We use a well-established measure (Pettigrew and Tropp 2006) of how much contact participants had with Mexican American, Black, and White people. Contact measures are sometimes criticized because they are self-reported and are therefore subject to social desirability biases; however, research that specifically investigates the relationship between observer ratings and self-ratings of contact finds that, overall, self-reports are valid measures of contact (Hewstone, Judd, and Sharp 2011). For our measure, we asked participants how frequently they had done the following things with people of a different race-ethnicity: talk on the phone with, confide in, lend something to, and so on. Responses ranged from 1 (never) to 5 (frequently). For each participant, we averaged the nonmissing items.¹⁰

7. In eight groups of the Mexican American–White study, group members did not correctly identify each other’s ethnicity. They were replaced with other groups. In the Black-White study, all participants correctly identified race.

8. In no groups did all participants fail the scope condition checks. Thus no groups were omitted on that basis.

9. As with the scope condition checks, there were no groups in which all group members failed the manipulation check and therefore no groups were omitted on this basis.

10. Note that these questions all concerned voluntary relations (for example, confide in) and not relations that were circumstantial or not necessarily voluntary (for example, been in classrooms with).

Table 1. Descriptive Statistics by Study

	Black-White (N = 160)			Mexican American-White (N = 150)				
	Mean-Proportion	Standard Deviation	Minimum	Maximum	Mean-Proportion	Standard Deviation	Minimum	Maximum
Contact with different race	3.40	1.01	1.00	5.00	3.49	0.97	1.10	5.00
Intergroup anxiety toward different race	3.82	1.38	1.00	6.43	2.20	0.92	1.00	4.89
Willingness to stay with same group	1.16	0.63	-1.00	2.00	0.98	0.67	-1.00	2.00
Perceived competence of different race group members	8.25	2.72	1.00	11.00	7.90	2.23	1.00	11.00
Difference in deference toward MA-Black and White group members ^a	-1.12	8.70	-26.00	24.00	-2.14	11.34	-40.00	35.00
Probability of each group position								
Least influential	0.34				0.38			
Middle	0.31				0.27			
Most influential	0.35				0.35			

Source: Authors' tabulations.

^a Negative values indicate that the Black or Mexican American group members deferred more than the White group member, and positive values indicate that the White group member deferred more than the Black or Mexican American group members.

Intergroup Anxiety

Using a measure from Walter Stephan and Cookie Stephan (1985), we measure intergroup anxiety by asking participants what “feelings or emotions” they might feel “when you interact with a ____ person” where the blank is filled with a race or an ethnicity, in our study, Mexican American, Black, or White. The emotions include things such as confident, suspicious, and threatened, and participants could choose a number ranging between 1 (not at all) and 7 (very much) (Stephan and Stephan 1985). All items were coded so that higher numbers indicate more intergroup anxiety. We then averaged the items.

Willingness for Future Contact

Willingness to have future contact with specific out-group members was measured using two questions, both of which were measured on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questions were “In the future, I would be willing to work with my group again.” and “In the future, I would choose to work with another group over working with the same group I worked with today.” The questions were combined into one measure by subtracting the desire to leave variable from the desire to stay variable and dividing it by two. The final variable ranges from -1 to 2, higher numbers indicating greater willingness to interact with the same group in the future.

Competence Assessments

To measure the participants’ perceptions of their group members’ competence, participants were asked to evaluate each group member. Specifically, participants were told, “How would you rate [team member] in terms of their performance on the tasks?” Choices ranged from 0 (extremely incompetent) to 10 (extremely competent).

Deference

As mentioned, participants first ranked items in order of importance for survival in the scenario. The group then met and discussed how they should order the items to present as their collective opinion. The difference between participants’ original opinions and their final group decision is a measure of deference given

to others in the group (Berger et al. 1992; Berger, Cohen, and Zelditch 1972). The greater the difference between the individual’s ranking and the final group ranking, the greater the individuals’ deference. To measure our questions of interest appropriately, we used these measures of deference in two ways.

First, within each group, we examined each group members’ deference and ranked them from least deferential (most influential) to most deferential (least influential). In the case of a tie for most or least influential, the tied group members were put in the same position. For example, if two group members deferred twenty and one deferred twenty-four total points, then the two group members who deferred twenty points were both ranked as least influential in the group. If there was a tie for most or least influential, both team members were put in that position and the middle position in that group was left empty. This explains the imbalance across group positions in table 1.

Next, within each group, we examined the extent to which the White group members deferred relative to their Black or Mexican American group members on each question and overall. For each item that was ranked, the deference that the Black or Mexican American group members gave was subtracted from the deference the White group members gave. Thus negative numbers indicate that the Black or Mexican American group member deferred more than the White group members, and positive numbers indicate that the White group members deferred more than the Black or Mexican American.

ANALYTIC STRATEGY

We analyze data by each hypothesis. We present analyses separately for each study, and when appropriate, separately by condition or race-ethnicity. For continuous dependent variables (for example, intergroup anxiety, deference to specific group members, perceived competence, willingness to interact with group in future), we use linear regression, and for ordinal dependent variables (for example, group influence position), we use ordered logistic regression. Where appropriate, we use post-estimation and difference of difference

tests (Long and Freese 2014). When testing directional hypotheses, we present one-tailed tests. When testing null hypotheses, that is, those where we predict there will not be a difference (H4b, H4d, H5b), we present two-tailed tests (but also see tests of equivalence in appendix B). All analyses are conducted in Stata 15.1.

Because individuals are nested within groups, we cluster the standard errors by group in all analyses. Additionally, because the variance is not normally distributed, we use bootstrapping (Freedman 1981). Finally, because individuals are randomly assigned to condition, we do not use control variables in models in which experimental condition is the independent variable. In models in which prior contact is the independent variable, however, we use experimental condition as a control variable. Notably, effects hold with or without condition as a control variable.

To examine whether intergroup anxiety mediates the relationship between past contact with out-group members and willingness to interact with group members in the future (hypothesis 3), we use Sobel tests of mediation (Sobel 1982). Sobel tests calculate a test statistic for the significance of the indirect effect of the mediating variable, that is, intergroup anxiety. Because we did not experimentally manipulate contact or intergroup anxiety, the mediation tests cannot be interpreted as causal; however, based on theory and associational evidence, they can provide some indication about how past contact increases willingness for future interaction.

FINDINGS

For a summary of all hypotheses and results of null hypothesis tests, see table A.1. For hypotheses 1a and 1b, we predicted that in the control—but not in the experimental—condition, White group members would view Black and Mexican American partners as less competent than other White group members. We find partial support for this hypothesis (see figure 1). Contrary to predictions, White participants in the control condition and experimental condition evaluated their Black group members as similarly competent to their White group members ($p = \text{n.s.}$, both contrasts). As predicted,

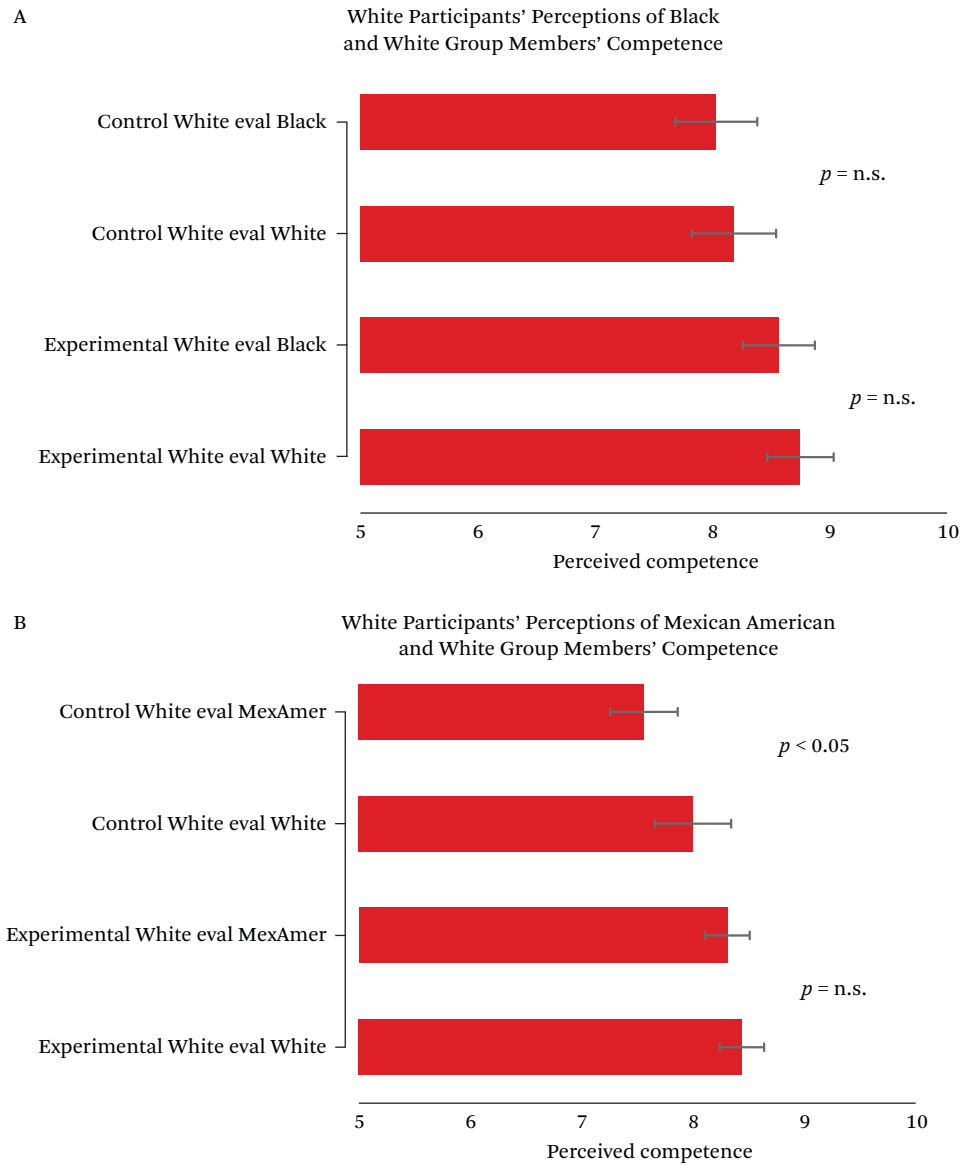
White participants in the control condition, but not the experimental condition, evaluated Mexican American group members as less competent than White group members ($b_{\text{control}} = -0.44$, $p < .05$; $b_{\text{experimental}} = -0.13$, $p = \text{n.s.}$).

For hypotheses 2a and 2b, we predicted that in the control—but not in the experimental—condition, Black and Mexican American participants would view themselves as less competent than their White counterparts. We find support for this hypothesis (see figure 2). As predicted, Black participants in the control condition, but not the experimental condition, evaluated themselves as less competent than White group members ($b_{\text{control}} = -0.917$, $p < .05$; $b_{\text{experimental}} = -0.283$, $p = \text{n.s.}$). Similarly, Mexican American participants in the control condition, but not the experimental condition, evaluated themselves as less competent than White group members ($b_{\text{control}} = -0.820$, $p < .05$; $b_{\text{experimental}} = -0.500$, $p = \text{n.s.}$).

For hypotheses 3a and 3b, we predicted that in the control—but not in the experimental—condition, Black and Mexican American group members would be less influential than their White group members. Again, we find partial support for this hypothesis (see figure 3). Contrary to predictions, in the control and experimental conditions, there was no difference in the probability of group position between Black and White group members ($p = \text{n.s.}$, all contrasts). As predicted, however, in the control condition, relative to White group members, Mexican American group members are more likely to be in the least influential position ($p_{\text{W}} = 0.292$ vs $p_{\text{MA}} = 0.560$, $\Delta = 0.267$, $p < .05$) and less likely to be in the most influential position ($p_{\text{W}} = 0.445$ vs. $p_{\text{MA}} = 0.207$, $\Delta = -0.238$, $p < .05$), and there was no difference in their probability of being in the middle position ($\Delta = -0.029$, $p = \text{n.s.}$). In the experimental condition for the Mexican American–White study, the difference in the probability of being in the least, most, or middle influential position ($p = \text{n.s.}$, all contrasts) was not significant.

For hypothesis 4a, we predicted that for members of historically advantaged social groups, increased (prior) contact with out-group members would be associated with increased perceptions of competence of specific out-group members. We examine this question

Figure 1. White Group Members' Evaluations of Black and Mexican American Group Members' Competence



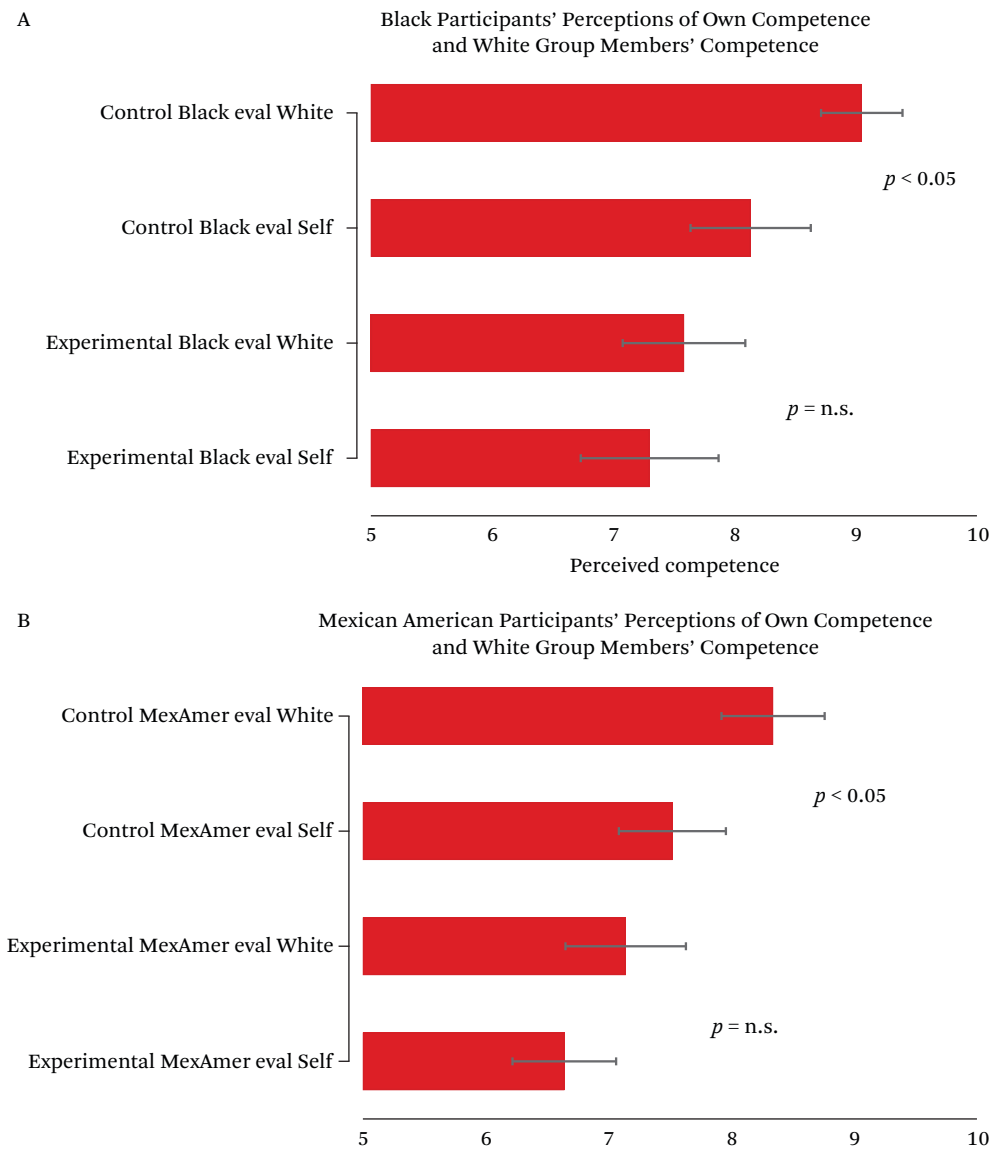
Source: Authors' tabulations.

separately by study (Black-White and Mexican American-White groups) and experimental condition. We do not find support for this hypothesis. There is no effect of contact on White participants' evaluations of Black or Mexican American group members' competence for either the experimental or control condition ($p = n.s.$, all contrasts).

For hypothesis 4b, we predicted that for

members of historically advantaged social groups, increased (prior) contact with out-group members would be associated with increased deference toward specific out-group members. We examine this question separately by study (Black-White and Mexican American-White groups) and experimental condition. We do not find support for this hypothesis. There is no effect of contact on White participants'

Figure 2. Black and Mexican American Group Members' Evaluations of White Group Members' Competence



Source: Authors' tabulations.

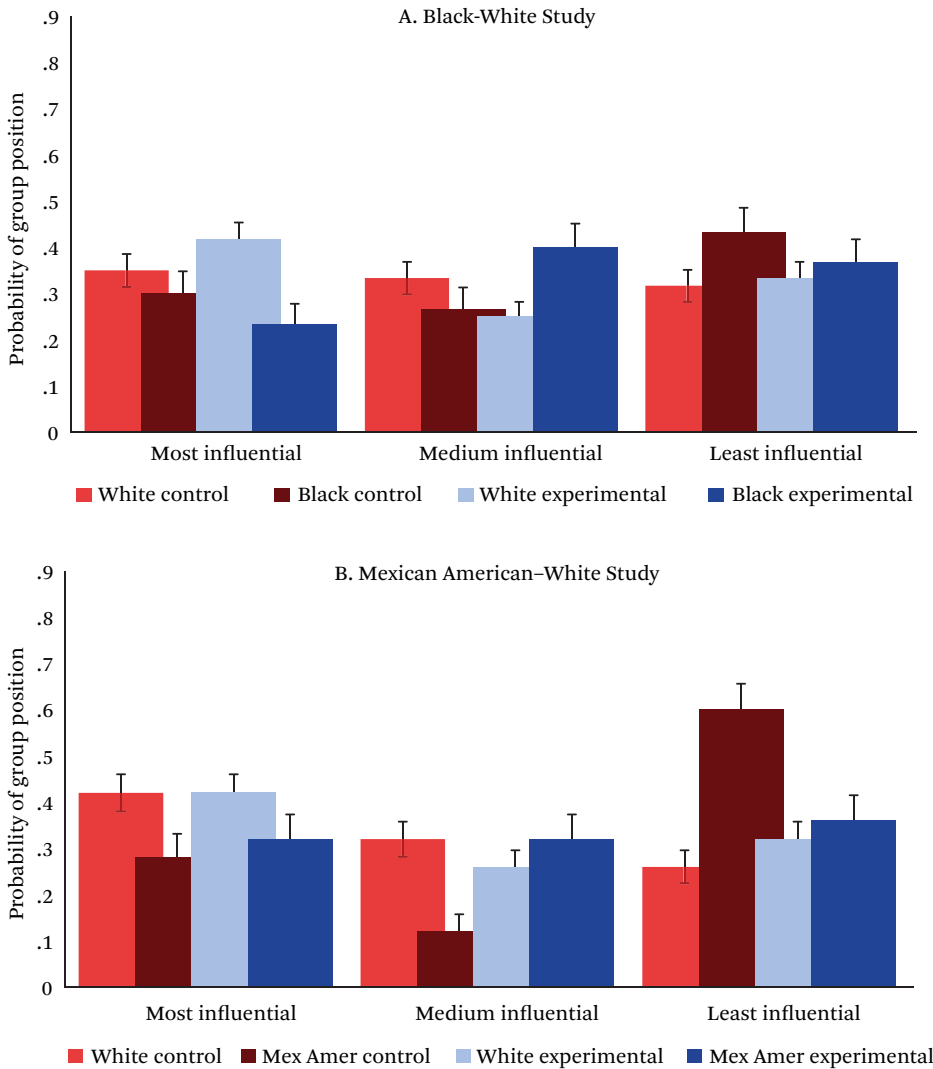
deference toward Black or Mexican American group members for either the experimental or control condition ($p = n.s.$, all contrasts).

For hypothesis 5a, we predicted that past contact with out-group members would be associated with higher willingness to have future contact with specific out-group members.¹¹ As

predicted, we find that for White group members, past contact with Black individuals is associated with higher willingness to have future contact with their group ($b = 0.105$, $p < .05$). Similarly, we find that for White group members, past contact with Mexican American individuals is associated with higher willingness to

11. We acknowledge that this analysis is not equivalent for historically advantaged and excluded individuals given that each group included two White participants and one Black or Mexican American participant.

Figure 3. Predicted Probabilities of Group Position by Race, Ethnicity, and Condition



Source: Authors' tabulations.

have future contact with their group ($b = 0.114$, $p < .05$). In contrast, for Black and Mexican American group members, we do not find a relationship between past contact with White individuals and willingness to have future contact with their group ($p = n.s.$, both). In summary, contact appears to have the predicted effect on willingness to interact for White participants, but not Mexican American or Black participants. For sensitivity analyses, both measures were analyzed separately using ordered logistic regression and the findings were consistent.

For hypothesis 5b, we predicted that past contact with out-group members would be associated with lower reported intergroup anxiety toward out-group members. As predicted, we find that for White participants, past contact with Black individuals and Mexican American individuals is associated with lower intergroup anxiety toward Black and Mexican American individuals ($b_{W/B} = -0.238$, $p < .001$; $b_{W/MA} = -0.251$, $p < .001$). Similarly, for Black and Mexican American participants, past contact with White individuals is associated with lower intergroup anxiety toward White individuals

($b_{B/W} = -0.329, p < .01$; $b_{MA/W} = -0.288, p < .001$). In summary, for all groups, contact reduces intergroup anxiety.

For hypothesis 5c, we predicted that intergroup anxiety would mediate the effect between past contact and willingness for future contact with specific out-group members. For White participants, intergroup anxiety explains about 76 percent of the relationship between past contact with Black individuals and willingness for future contact with group members ($p < .01$). Additionally, for White participants, intergroup anxiety explains about 38 percent of the relationship between past contact with Mexican American individuals and willingness for future contact with group members, although this effect is only marginally significant ($p = .055$, one-tailed). Because, for Black and Mexican American participants, past contact does not have a statistically significant effect on willingness to interact with one's group in the future, we do not examine the mediating effect of intergroup anxiety on the willingness for future contact.

DISCUSSION AND CONCLUSION

Although both intergroup contact theory and status characteristics and expectations states theory seek to determine the processes by which prejudice and discrimination might be ameliorated, there has been little connection between the two literatures. In this project, we contribute to both literatures by examining the effects of status-based interventions and contact on both attitudes and behavior toward out-group members. In doing so, we make four main contributions.

Status Characteristics and Expectation States Theory

Our first set of predictions related to competence assessment by group members and their deferential behavior. Competence assessments and deferential behavior directly relate to task ability and, for SC-EST research, is usually at the heart of stereotypes activated in team settings. Competence and deference measures are different from assessments related to "willingness to interact," as interacting itself does not necessarily relate to competence but is instead a more affective measure.

For White and Mexican American groups, we find that the experimental manipulation intervenes in status processes. Specifically, in the experimental condition, but not the control condition, White participants rate their Mexican American counterparts as similarly competent to White group members. When we look at deferential behavior, we find an intervention effect such that in the control condition but not the experimental condition, Mexican American participants are less influential than White participants. In summary, in groups of Mexican American and White participants, the intervention decreased inequality. For groups that included White and Black participants, however, there was no effect of the intervention on either competence attributions or deference (apart from Black participants' assessments of their competence).

Intergroup Contact Theory

Our other set of predictions considered how prior contact affected willingness to interact with the group. The ICT literature consistently documents how prior contact with an out-group positively impacts willingness to interact with members of the out-group in the future. We ask, does prior contact affect the desire to further interact with those in the group that was initially assigned?

We find that past contact increases White participants' willingness for future contact with the group, but no support for this relationship for Mexican American or Black participants. We also find support for one of the most established findings in ICT: prior out-group contact decreased intergroup anxiety for White, Mexican American, and Black participants. Finally, for White participants we find that intergroup anxiety mediates the relationship between prior contact and willingness to interact. These findings largely support ICT; however, more research is needed to understand the potential for contact to differentially affect members of historically advantaged and disadvantaged groups (Pettigrew and Hewstone 2017). By examining two different racial-ethnic group compositions, we can examine the robustness of the theories and importance of different contexts. The differences we find in our study are theoretically important.

Combining ICT and SC-EST

Finally, we examined the effect of contact on assessments of competence (cognitive stereotypes) and deferential behavior. In so doing, we examined the effect of a well-established intervention (contact) on common measures of group inequality from SC-EST. Contrary to expectations, we find no effect of contact on White group members' assessments of Black or Mexican American group members' competence or deference. These findings are particularly interesting, because contact reduces intergroup anxiety and, for White group members, increases willingness for future contact. Thus, although contact is positively associated with more positive affect, it does not interrupt the emergence of a racial status hierarchy.

Conclusion

In summary, we combine intergroup contact theory and status characteristics and expectation states theory to address inequality in small task-oriented groups. We find fruitful integrations, but we also uncover some further mysteries. First, we find support for one of the most well-established patterns in ICT, that increasing contact with out-groups decreases intergroup anxiety for all the groups, and that intergroup anxiety operates as a mediating variable for the effect of contact on willingness to interact. However, and in line with some research, contact affected White but not Black or Mexican American participants' willingness to work together in the future. Analyses suggest no overall difference between White and Black or White and Mexican American group members' willingness to interact in the future ($p = n.s.$, all contrasts). Indeed, participants overwhelmingly desired to interact with their same groups in the future rather than a different group. It is simply that past contact does not affect willingness to interact in the same way for White participants and Black or Mexican American participants.

Contrary to expectations, prior contact had no effect on assessments of competence for any groups. Although contact did affect White individuals' willingness to work together in the future, a more affective evaluation, it did not affect White individuals' assessments of Black or Mexican American group members' compe-

tence. This certainly suggests that an important avenue for contact theory would be a finer assessment of stereotype content. Perhaps, as research suggests, contact works better for reducing affective forms of prejudice, but lesser for cognitive forms of prejudice (Pettigrew and Hewstone 2017; Pettigrew et al. 2011).

The inconsistent complexity intervention affected the Mexican American–White groups more so than the Black–White groups. Specifically, in the Mexican American–White groups, the intervention reduced race-based inequality; however, this was not the case for the Black–White groups. Indeed, the deference levels among Black and White group members who did not receive interventions were similar to those that did. This is likely a demonstration of differences in stereotype content and strength associated with different racial-ethnic groups. Although Goar and Sell (2005) assessed groups of Black and White participants and find substantial differences between Black and White participants when there was no intervention, these groups were in a different location than in this study, specifically, the Midwest rather than the Southwest. This may indicate that stereotypes differ in different locations: stereotypes are not just global, they are also local.

Within our dataset, we do not have measures of initial stereotypes. One reason is that, by measuring these stereotypes, we may have affected participants' behavior. However, because stereotypes are affected by contact, one way to examine the potential effect of initial stereotypes on the strength of the IC interventions would be to assess the levels of contact in the differing settings. If, for example, the overall levels of contact differed between groups of Mexican American and White participants and groups of Black and White participants, it could suggest that the strength and perhaps content of stereotypes also differed. However, we find no differences in contact between the groups of Mexican American and White participants and groups of Black and White participants.

We do, however, find differences in intergroup anxiety levels between the groups of Mexican American and White participants and groups of Black and White participants. White participants have much higher levels of social

anxiety toward Black than toward Mexican American group members. These levels could have a couple explanations.¹²

First, it could signal that White group members are concerned that they might appear to be racist in interactions within public groups. This concern might further activate intergroup anxiety and result in White individuals leaving interracial interactions feeling cognitively or emotionally depleted (Richeson and Shelton 2007). Although we cannot test this directly, we find that when White group members had higher intergroup anxiety, they were less content with the group interaction.¹³

Another possibility is that the stereotypes of Black women as assertive may decrease negative attributions related to competence (Harkness 2016; Livingston, Rosette, and Washington 2012). Again, although we cannot test this directly, we find some support for the idea, because White group members do not rank Black group members as less competent than White group members.¹⁴ Although we cannot conclusively demonstrate the reason for the lack of differences in deference between Black and White group members, our results point to the importance of assessing the initial conditions in each specific context (that is, perceived competence associated with intersectional stereotypes).

The combination of ICT and SC-EST demonstrates how the two theories can supplement each other and points out areas for future collaboration. First, we sought to understand how the general findings of ICT could relate to small, task-oriented groups to which members were assigned. We find that, in general, ICT helps explain, for White individuals, the rela-

tionship among contact, social anxiety, and affective measures related to a particular group. Relationships were not as clear for Black and Mexican American individuals. This relates to a common criticism that ICT has not researched those from socially excluded groups as frequently as those from socially advantaged groups (see discussion in Pettigrew and Hewstone 2017).

Second, although contact is predictive of affect, it did not predict competence assessments or measures of deference. Put differently, we find that the contact-based interventions are more effective at changing affective prejudices than cognitive prejudices. This suggests that, despite affective sentiments between members of historically advantaged and disadvantaged groups, status hierarchies may persist. If this pattern is reproduced in future research, it may suggest that status is particularly insidious, maintaining systems of inequality irrespective of affective sentiment.

In conclusion, we call for more work that combines insights from psychological and sociological social psychology to intervene in racial inequality. We support calls for more studies that use random assignment in assessment of the scope of intergroup contact theory (Paluck and Green 2009; Paluck, Green, and Green 2019; Paluck et al. 2021) and this would also provide an avenue to combining SC-EST and ICT. We also echo Thomas Pettigrew's and Miles Hewstone's call to avoid what they call "the single factor fallacy" of research (2017). That is, ethnic relations exist within a complex set of contexts. Researchers must consider the differing histories and norms that frame interactions among the various groups.

12. Notably, no association was found between deference and intergroup anxiety.

13. Analysis available on request from first author.

14. However, Black group members rate themselves as less competent than White group members in the control but not the experimental conditions. This was the same (predicted) pattern that we see in the White and Mexican American groups.

APPENDIX A

Table A.1. Summary of Hypotheses and Tests of Null Hypothesis

Hypotheses	Experiment 1		Experiment 2	
	Black	White	Mexican American	White
1a Without an intervention, Black and Mexican American participants will view themselves as less competent than their White group members.	✓		✓	
2a Without an intervention, White participants will view Black and Mexican American group members as less competent than other White group members.		x		✓
3a Without an intervention, Black and Mexican American group members will be less influential than White group members.	x	x	✓	✓
1b With an intervention, Black and Mexican American group members <i>will not</i> view themselves as less competent than their White group members.	✓		✓	
2b With an intervention, White participants <i>will not</i> view Black and Mexican American group members as less competent than other White group members.		✓		✓
3b With an intervention, Black and Mexican American group members <i>will not</i> be less influential than White group members.	✓	✓	✓	✓
4a For White participants, increased contact with outgroup members (Black and Mexican American participants) will be associated with increased perceptions of competence of specific outgroup members.		x		x
4b For White participants, increased contact with outgroup members (Black and Mexican American participants) will be associated with increased deference toward specific outgroup members.		x		x
5a Past contact with outgroup members will be associated with higher willingness to have future contact with specific outgroup members within the group.	x	✓	x	✓
5b Past contact with outgroup members will be associated with lower reported intergroup anxiety toward outgroup members.	✓	✓	✓	✓
5c Intergroup anxiety will mediate the effect between past contact and willingness for future contact with specific outgroup members within the group.		✓		✓

Source: Authors' compilation.

Note: ✓ indicates we can reject the null at $p < .05$. x indicates we fail to reject the null hypothesis. Empty cells indicate that the test was not applicable.

APPENDIX B. TESTS OF EQUIVALENCE

When examining null hypotheses (1b, 2b, 3b), in addition to considering nonsignificant p -values, we also consider tests of equivalence (Janssen and Wellek 2010; Seaman and Serlin 1998; Schuirmann 1987; Dinno 2017). Tests of equivalence are designed to test the hypothesis that the effect is no different from zero. This is different from p -values from regression analyses, which provide the probability of getting a certain effect size if the actual effect size in the population was zero. This is a subtle but important difference.

As noted, in the Mexican American–White study, White group members in the control, but not the experimental condition evaluated White group members as more competent than Mexican American group members. Tests of equivalence further support these findings. In the experimental conditions, the observed effect falls within the equivalence bounds, meaning that there was practically zero difference in White group members' evaluations of Mexican American and White group members' competence ($p_{MA} < .001$; Seaman and Serlin 1998). Notably, this test of equivalence is also significant in the experimental condition for the Black–White study. However, because the control condition was not statistically significant, the overall meaning is less clear.

In both the Black–White and Mexican American–White studies, in the control condition, Black and Mexican American group members evaluated themselves as less competent than their White group members. In the experimental condition, however, no significant difference was found in Black and Mexican American group members' evaluations of their own and White group members' competence. Tests of equivalence further support these findings. In the experimental conditions of both studies, the observed effect falls within the equivalence bounds, meaning we found practically zero difference in Black or Mexican American group members' evaluations of their own or White group members' competence ($p_{BW} < .01$; $p_{MA} < .05$) (Seaman and Serlin 1998).

Hypothesis 3b predicted no difference in group position by ethnicity in the experimental condition. To confirm this hypothesis, we used tests of equivalence with proportions. Again,

the tests of equivalence support the findings from the regression output. For the Mexican American–White study, the observed difference in the probability of group members being in each group position by ethnicity falls within equivalence bounds for the experimental condition.

APPENDIX C. GRAPH THEORETICAL EXPLANATION OF THE INCONSISTENT COMPLEXITY INTERVENTION

One way to think of the burden of proof process and intervention in that process is to think of the number of attributional “steps” people in an interaction might employ to help make decisions. These steps are often unconscious. For example, if two people are working together on one task, and they have information only about the diffuse status characteristics that separate them (for example, one might be a man while the other is a woman), those diffuse status characteristics will be used to make inferences about who should be given more influence than the other. This is especially the case for “unitary tasks,” tasks that are assumed to be determined by one specific skill (or specific status characteristic). An example is that men might be granted more influence on a task involving GIS skill.

On the basis of research by Cohen (1993) and Fişek (1991), Goar and Sell (2005) argued that if the task itself was defined as *not* unitary, but rather composed of many differently evaluated subtasks, the steps people employ in decision-making change. The steps increase, and since skills associated with the tasks are not necessarily related to each other, “easy” generalization or stereotyping is more difficult. In these cases, there is an intervention in the burden of proof process. Importantly, Goar and Sell argued that the task itself could be the same, but the *perception* of the task could change the interaction and result in less inequality between interactants. Rather than defining the task as involving only GIS, one might describe it as involving many different skills that might not be related to each other, such as geometric reasoning, topological understanding, and ecological and biological knowledge.

This process can also be described in graph

theory, which can codify the attributional steps mentioned above (Berger et al. 1977; Goar and Sell 2005; Webster and Hysom 1998).

REFERENCES

- American Anthropological Association (AAA). 1998. "AAA Statement on Race." *American Anthropologist* 100(3): 712–13. Accessed June 11, 2022. <https://www.americananthro.org/ConnectWithAAA/Content.aspx?ItemNumber=2583>.
- Barlow, Fiona Kate, Stefania Paolini, Anne Pedersen, Matthew J. Hornsey, Helena R. M. Radke, Jake Harwood, Mark Rubin, and Chris G. Sibley. 2012. "The Contact Caveat: Negative Contact Predicts Increased Prejudice More Than Positive Contact Predicts Reduced Prejudice." *Personality and Social Psychology Bulletin* 38(12): 1629–43. DOI: <https://doi.org/10.1177/0146167212457953>.
- Beelmann, Andreas, and Kim Sarah Heinemann. 2014. "Preventing Prejudice and Improving Intergroup Attitudes: A Meta-Analysis of Child and Adolescent Training Programs." *Journal of Applied Developmental Psychology* 35(1): 10–24. DOI: <https://doi.org/10.1016/j.appdev.2013.11.002>.
- Benard, Stephen, Doan Long, D. Adam Nicholson, Emily Meanwell, Eric L. Wright, and Peter Lista. 2022. "To Forgive Is Divine? Morality and the Status Value of Intergroup Revenge and Forgiveness." *RSF: The Russell Sage Foundation of the Social Sciences* 8(6): 122–39. DOI: <https://doi.org/10.7758/RSF.2022.8.6.07>.
- Berger, Joseph, Bernard Cohen, and Morris Zelditch. 1972. "Status Characteristics and Social Interaction." *American Sociological Review* 37(3): 241–55.
- Berger, Joseph, M. Hammit Fişek, Robert Z. Norman, and Morris Zelditch Jr. 1977. *Status Characteristics and Social Interaction*. New York: Elsevier.
- Berger, Joseph, Robert Z. Norman, James W. Balkwell, and Roy F. Smith. 1992. "Status Inconsistency in Task Situations: A Test of Four Status Processing Principles." *American Sociological Review* 57(6): 843–56. DOI: <https://doi.org/10.2307/2096127>.
- Berger, Joseph, Susan J. Rosenholtz, and Morris Zelditch Jr. 1980. "Status Organizing Processes." *Annual Review of Sociology* 6(1): 479–508.
- Berger, Joseph, and Murray Webster Jr. 2006. "Expectations, Status, and Behavior." In *Contemporary Social Psychological Theories*, edited by Peter J. Burke. Stanford, Calif.: Stanford University Press.
- . 2018. "Expectations, Status, and Behavior Theories." In *Contemporary Social Psychological Theories*, 2nd ed. Stanford, Calif.: Stanford University Press.
- Biernat, Monica, and Diane Kobrynowicz. 1997. "Gender- and Race-Based Standards of Competence: Lower Minimum Standards but Higher Ability Standards for Devalued Groups." *Journal of Personality and Social Psychology* 72(3): 544–57.
- Binder, Jens, Hanna Zagefka, Rupert Brown, Friedrich Funke, Thomas Kessler, Amelie Mummendey, Annemie Maquil, Stephanie Demoulin, and Jacques-Philippe Leyens. 2009. "Does Contact Reduce Prejudice or Does Prejudice Reduce Contact? A Longitudinal Test of the Contact Hypothesis Among Majority and Minority Groups in Three European Countries." *Journal of Personality and Social Psychology* 96(4): 843–56. DOI: <https://doi.org/10.1037/a0013470>.
- Brambilla, Marco, Marcella Ravenna, and Miles Hewstone. 2012. "Changing Stereotype Content Through Mental Imagery: Imagining Intergroup Contact Promotes Stereotype Change." *Group Processes & Intergroup Relations* 15(3): 305–15. DOI: <https://doi.org/10.1177/1368430211427574>.
- Brown, Rupert, and Miles Hewstone. 2005. "An Integrative Theory of Intergroup Contact." In *Advances in Experimental Social Psychology* 37: 255–343. DOI: [https://doi.org/10.1016/S0065-2601\(05\)37005-5](https://doi.org/10.1016/S0065-2601(05)37005-5).
- Cohen, Elizabeth G. 1982. "A Multi-Ability Approach to the Integrated Classroom." *Journal of Reading Behavior* 14(4): 439–60.
- . 1993. "From Theory to Practice: The Development of an Applied Research Program." In *Theoretical Research Programs: Studies in the Growth of Theory*, edited by Joseph Berger and Morris Zelditch. Stanford, Calif.: Stanford University Press.
- Cohen, Elizabeth G., and Rachel Lotan, eds. 1997. *Working for Equity in Heterogeneous Classrooms: Sociological Theory in Practice*. New York: Teachers College Press.
- Cohen, Elizabeth G., and Susan S. Roper. 1972. "Modification of Interracial Interaction Disability: An Application of Status Characteristic Theory." *American Sociological Review* 37(6): 643–57.
- Correll, Shelley J., and Cecilia Ridgeway. 2003. "Ex-

- peception States Theory." In *Handbook of Social Psychology*, edited by John Delamater. New York: Kluwer Academic Press.
- Delgado, Richard, and Jean Stefancic, eds. 2001. *Critical Race Theory: An Introduction*. New York: New York University Press. Accessed June 11, 2022. <http://uolibraries.worldcat.org/title/critical-race-theory-an-introduction/oclc/45387241>.
- Dinno, Alexis. 2017. *Two One-Sided Tests of Equivalence* [computer program]. Version 3.1.3. <https://www.alexisdinno.com/stata/tost.html>.
- Dittmann, Andrea G., Nicole M. Stephens, and Sarah S. M. Townsend. 2020. "Achievement Is Not Class-Neutral: Working Together Benefits People from Working-Class Contexts." *Journal of Personality and Social Psychology: Attitudes and Social Cognition* 119(3): 517–39.
- Dovidio, John F., Angelika Love, Fabian M. H. Schellhaas, and Miles Hewstone. 2017. "Reducing Intergroup Bias through Intergroup Contact: Twenty Years of Progress and Future Directions." *Group Processes & Intergroup Relations* 20(5): 606–20. DOI: <https://doi.org/10.1177/1368430217712052>.
- Esqueda, Cynthia Willis, Russ K. E. Espinoza, and Scott E. Culhane. 2008. "The Effects of Ethnicity, SES, and Crime Status on Juror Decision Making: A Cross-Cultural Examination of European American and Mexican American Mock Jurors." *Hispanic Journal of Behavioral Sciences* 30(2): 181–99. DOI: <https://doi.org/10.1177/0739986308315319>.
- Feagin, Joe R., and Kimberley Ducey. 2019. *Racist America: Roots, Current Realities, and Future Reparations*, 4th ed. New York: Routledge.
- Fişek, M. Hamit. 1991. "Complex Task Structures and Power and Prestige Orders." *Advances in Group Processes* 8: 115–34.
- Fiske, Susan T., Amy J. C. Cuddy, Peter Glick, and Jun Xu. 2002. "A Model of (Often Mixed) Stereotype Content: Competence and Warmth Respectively Follow from Perceived Status and Competition." *Journal of Personality and Social Psychology* 82(6): 878–902. DOI: <https://doi.org/10.1037/0022-3514.82.6.878>.
- Freedman, David A. 1981. "Bootstrapping Regression Models." *Annals of Statistics* 9(6): 1218–28.
- Freese, Lee. 1976. "The Generalization of Specific Performance Expectations." *Sociometry* 39(3): 194. DOI: <https://doi.org/10.2307/2786512>.
- Fussell, Elizabeth. 2014. "Warmth of the Welcome: Attitudes Toward Immigrants and Immigration Policy in the United States." *Annual Review of Sociology* 40(1): 479–98. DOI: <https://doi.org/10.1146/annurev-soc-071913-043325>.
- Goar, Carla, and Jane Sell. 2005. "Using Task Definition to Modify Racial Inequality Within Task Groups." *Sociological Quarterly* 46(3): 525–43. DOI: <https://doi.org/10.1111/j.1533-8525.2005.00025.x>.
- Hamedani, Mar Yam G., and Hazel Rose Markus. 2019. "Understanding Culture Clashes and Catalyzing Change: A Culture Cycle Approach." *Frontiers in Psychology* 10 (April): 700. DOI: <https://doi.org/10.3389/fpsyg.2019.00700>.
- Harkness, Sarah K. 2016. "Discrimination in Lending Markets: Status and the Intersections of Gender and Race." *Social Psychology Quarterly* 79(1): 81–93. DOI: <https://doi.org/10.1177/0190272515623459>.
- Hayward, Lydia E., Linda R. Tropp, Matthew J. Hornsey, and Fiona Kate Barlow. 2017. "Toward a Comprehensive Understanding of Intergroup Contact: Descriptions and Mediators of Positive and Negative Contact Among Majority and Minority Groups." *Personality and Social Psychology Bulletin* 43(3): 347–64. DOI: <https://doi.org/10.1177/0146167216685291>.
- Hewstone, Miles, Charles M. Judd, and Melanie Sharp. 2011. "Do Observer Ratings Validate Self-Reports of Intergroup Contact?: A Round-Robin Analysis." *Journal of Experimental Social Psychology* 47(3): 599–609. DOI: <https://doi.org/10.1016/j.jesp.2010.12.014>.
- Janssen, Arnold, and Stefan Wellek. 2010. "Exact Linear Rank Tests for Two-Sample Equivalence Problems with Continuous Data." *Statistica Neerlandica* 64(4): 482–504.
- Katz, Irwin, Judith Goldston, and Lawrence Benjamin. 1958. "Behavior and Productivity in Biracial Work Groups." *Human Relations* 11(2): 126–41. DOI: <https://doi.org/10.1177/001872675801100203>.
- Killewald, Alexandra, and Brielle Bryan. 2018. "Falling Behind: The Role of Inter- and Intragenerational Processes in Widening Racial and Ethnic Wealth Gaps Through Early and Middle Adulthood." *Social Forces* 97(2): 705–40.
- Kotzur, Patrick F., and Ulrich Wagner. 2021. "The Dynamic Relationship between Contact Opportunities, Positive and Negative Intergroup Contact, and Prejudice: A Longitudinal Investigation." *Journal of Personality and Social Psychology*

- 120(2): 418–42. DOI: <https://doi.org/10.1037/pspi0000258>.
- Kozol, Jonathan. 2005. *The Shame of the Nation: The Restoration of Apartheid Schooling in America*. New York: Three Rivers Press.
- Laar, Colette Van, Shana Levin, Stacey Sinclair, and Jim Sidanius. 2005. "The Effect of University Roommate Contact on Ethnic Attitudes and Behavior." *Journal of Experimental Social Psychology* 41(4): 329–45. DOI: <https://doi.org/10.1016/j.jesp.2004.08.002>.
- Livingston, Robert W., Ashleigh Shelby Rosette, and Ella F. Washington. 2012. "Can an Agentic Black Woman Get Ahead? The Impact of Race and Interpersonal Dominance on Perceptions of Female Leaders." *Psychological Science* 23(4): 354–58. DOI: <https://doi.org/10.1177/0956797611428079>.
- Lolliot, Simon, Benjamin Fell, Katharina Schmid, Ralf Wölfer, Hermann Swart, Alberto Voci, Oliver Christ, Rachel New, and Miles Hewstone. 2015. "Measures of Intergroup Contact." In *Measures of Personality and Social Psychological Constructs*, edited by Gregory J. Boyle, Donald H. Saklofsky, and Gerald Matthews. New York: Elsevier. DOI: <https://doi.org/10.1016/B978-0-12-386915-9.00023-1>.
- Long, J. Scott, and Jeremy Freese. 2014. *Regression Models for Categorical Dependent Variables Using Stata*, 3rd ed. College Station, Tex.: Stata Press.
- Lopez, J. Derek. 2005. "Race-Related Stress and Sociocultural Orientation Among Latino Students During Their Transition Into a Predominately White, Highly Selective Institution." *Journal of Hispanic Higher Education* 4(4): 354–65. DOI: <https://doi.org/10.1177/1538192705279594>.
- Maloney, E. K., Kimberly B. Rogers, and Lynn Smith-Lovin. 2022. "Status as Deference: Cultural Meaning as a Source of Occupational Behavior." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8(7): 70–88. DOI: <https://doi.org/10.7758/RSF.2022.8.7.04>.
- Manago, Bianca, Jane Sell, and Carla Goar. 2019. "Groups, Inequality, and Synergy." *Social Forces* 97(3): 1365–88. DOI: <https://doi.org/10.1093/sf/soy063>.
- Markovsky, Barry, Le Roy F. Smith, and Joseph Berger. 1984. "Do Status Interventions Persist?" *American Sociological Review* 49(3): 373–82.
- Mousa, Salma. 2020. "Building Social Cohesion Between Christians and Muslims Through Soccer in Post-ISIS Iraq." *Science* 369(6505): 866–70.
- Pager, Devah, and Hana Shepherd. 2008. "The Sociology of Discrimination: Racial Discrimination in Employment, Housing, Credit, and Consumer Markets." *Annual Review of Sociology* 34(1): 181–209.
- Pager, Devah, Bruce Western, and Bart Bonikowski. 2009. "Discrimination in a Low-Wage Labor Market: A Field Experiment." *American Sociological Review* 74(5): 777–99.
- Paluck, Elizabeth Levy, and Donald P. Green. 2009. "Prejudice Reduction: What Works? A Review and Assessment of Research and Practice." *Annual Review of Psychology* 60(1): 339–67. DOI: <https://doi.org/10.1146/annurev.psych.60.110707.163607>.
- Paluck, Elizabeth Levy, Seth A. Green, and Donald P. Green. 2019. "The Contact Hypothesis Re-Evaluated." *Behavioural Public Policy* 3(2): 129–58. DOI: <https://doi.org/10.1017/bpp.2018.25>.
- Paluck, Elizabeth Levy, Roni Porat, Chelsey S. Clark, and Donald P. Green. 2021. "Prejudice Reduction: Progress and Challenges." *Annual Review of Psychology* 72(1): 533–60. DOI: <https://doi.org/10.1146/annurev-psych-071620-030619>.
- Paolini, Stefania, Jake Harwood, Mark Rubin, Shanel Husnu, Nicholas Joyce, and Miles Hewstone. 2014. "Positive and Extensive Intergroup Contact in the Past Buffers against the Disproportionate Impact of Negative Contact in the Present: Past Contact Moderates Negative Contact Effects." *European Journal of Social Psychology* 44(6): 548–62. DOI: <https://doi.org/10.1002/ejsp.2029>.
- Pettigrew, Thomas F. 1997. "Generalized Intergroup Contact Effects on Prejudice." *Personality and Social Psychology Bulletin* 23(2): 173–85.
- . 2008. "Future Directions for Intergroup Contact Theory and Research." *International Journal of Intercultural Relations* 32(3): 187–99. DOI: <https://doi.org/10.1016/j.ijintrel.2007.12.002>.
- Pettigrew, Thomas F., and Miles Hewstone. 2017. "The Single Factor Fallacy: Implications of Missing Critical Variables from an Analysis of Intergroup Contact Theory 1: The Single Factor Fallacy." *Social Issues and Policy Review* 11(1): 8–37. DOI: <https://doi.org/10.1111/sipr.12026>.
- Pettigrew, Thomas F., and Linda R. Tropp. 2006. "A Meta-Analytic Test of Intergroup Contact Theory." *Journal of Personality and Social Psychology*

- 90(5): 751–83. DOI: <https://doi.org/10.1037/0022-3514.90.5.751>.
- . 2008. “How Does Intergroup Contact Reduce Prejudice? Meta-Analytic Tests of Three Mediators.” *European Journal of Social Psychology* 38(6): 922–34. DOI: <https://doi.org/10.1002/ejsp.504>.
- Pettigrew, Thomas F., Linda R. Tropp, Ulrich Wagner, and Oliver Christ. 2011. “Recent Advances in Intergroup Contact Theory.” *International Journal of Intercultural Relations* 35(3): 271–80. DOI: <https://doi.org/10.1016/j.ijintrel.2011.03.001>.
- Quillian, Lincoln, John Lee, and Brandon Honoré. 2020. “Racial Discrimination in the U.S. Housing and Mortgage Lending Markets: A Quantitative Review of Trends, 1976–2016.” *Race and Social Problems* 12(1): 13–28.
- Richeson, Jennifer A., and J. Nicole Shelton. 2007. “Negotiating Interracial Interactions: Costs, Consequences, and Possibilities.” *Current Directions in Psychological Science* 16(6): 316–20. DOI: <https://doi.org/10.1111/j.1467-8721.2007.00528.x>.
- Ridgeway, Cecilia L. 1991. “The Social Construction of Status Value: Gender and Other Nominal Characteristics.” *Social Forces* 70(2): 367. DOI: <https://doi.org/10.2307/2580244>.
- . 2019. *Status: Why Is It Everywhere? Why Does It Matter?* New York: Russell Sage Foundation.
- Ridgeway, Cecilia L., and Hazel Rose Markus. 2022. “The Significance of Status: What It Is and How It Shapes Inequality.” *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8(7): 1–25. DOI: <https://doi.org/10.7758/RSF.2022.8.7.01>.
- Scacco, Alexandra, and Shana S. Warren. 2018. “Can Social Contact Reduce Prejudice and Discrimination? Evidence from a Field Experiment in Nigeria.” *American Political Science Review* 112(3): 654–77. DOI: <https://doi.org/10.1017/S0003055418000151>.
- Schäfer, Sarina J., Mathias Kauff, Francesca Prati, Mathijs Kros, Timothy Lang, and Oliver Christ. 2021. “Does Negative Contact Undermine Attempts to Improve Intergroup Relations? Deepening the Understanding of Negative Contact and Its Consequences for Intergroup Contact Research and Interventions.” *Journal of Social Issues* 77(1): 197–216. DOI: <https://doi.org/10.1111/josi.12422>.
- Schuirmann, Donald J. 1987. “A Comparison of the Two One-Sided Tests Procedure and the Power Approach for Assessing the Equivalence of Average Bioavailability.” *Journal of Pharmacokinetics and Biopharmaceutics* 15(6): 657–80. DOI: <https://doi.org/10.1007/BF01068419>.
- Seaman, Michael A., and Ronald C. Serlin. 1998. “Equivalence Confidence Intervals for Two-Group Comparisons of Means.” *Psychological Methods* 3(4): 403–11.
- Short, Robert, and Lisa Magaña. 2002. “Political Rhetoric, Immigration Attitudes, and Contemporary Prejudice: A Mexican American Dilemma.” *Journal of Social Psychology* 142(6): 701–12. DOI: <https://doi.org/10.1080/00224540209603930>.
- Sobel, Michael E. 1982. “Asymptotic Confidence Intervals for Indirect Effects in Structural Equation Models.” *Sociological Methodology* 13: 290. DOI: <https://doi.org/10.2307/270723>.
- Stephan, Walter G. 2014. “Intergroup Anxiety: Theory, Research, and Practice.” *Personality and Social Psychology Review* 18(3): 239–55. DOI: <https://doi.org/10.1177/1088868314530518>.
- Stephan, Walter G., and Cookie White Stephan. 1985. “Intergroup Anxiety.” *Journal of Social Issues* 41(3): 157–75. DOI: <https://doi.org/10.1111/j.1540-4560.1985.tb01134.x>.
- Stephens, Nicole M., Hazel Rose Markus, and L. Taylor Phillips. 2014. “Social Class Culture Cycles: How Three Gateway Contexts Shape Selves and Fuel Inequality.” *Annual Review of Psychology* 65(1): 611–34. DOI: <https://doi.org/10.1146/annurev-psych-010213-115143>.
- Stephens, Nicole M., Sarah S. M. Townsend, and Andrea G. Dittmann. 2019. “Social-Class Disparities in Higher Education and Professional Workplaces: The Role of Cultural Mismatch.” *Current Directions in Psychological Science* 28(1): 67–73. DOI: <https://doi.org/10.1177/0963721418806506>.
- Tropp, Linda R. 2007. “Perceived Discrimination and Interracial Contact: Predicting Interracial Closeness among Black and White Americans.” *Social Psychology Quarterly* 70(1): 70–81. DOI: <https://doi.org/10.1177/019027250707000108>.
- Tropp, Linda R., and Thomas F. Pettigrew. 2005. “Differential Relationships Between Intergroup Contact and Affective and Cognitive Dimensions of Prejudice.” *Personality and Social Psychology Bulletin* 31(8): 1145–58. DOI: <https://doi.org/10.1177/0146167205274854>.
- Valencia, Richard R., and Mary S. Black. 2002. ““Mexican Americans Don’t Value Education!”—On the Basis of the Myth, Mythmaking, and De-

- bunking." *Journal of Latinos & Education* 1(2): 81. DOI: https://doi.org/10.1207/S1532771XJLE0102_2.
- Valentino, Lauren. 2022. "Status Lenses: Mapping Hierarchy and Consensus in Status Beliefs." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8(7): 89–110. DOI: <https://doi.org/10.7758/RSF.2022.8.7.05>.
- Webster, Murray, and Stuart J. Hysom. 1998. "Creating Status Characteristics." *American Sociological Review* 63(3): 351–78. DOI: <https://doi.org/10.2307/2657554>.
- Welch, Kelly, Allison Ann Payne, Ted Chiricos, and Marc Gertz. 2011. "The Typification of Hispanics as Criminals and Support for Punitive Crime Control Policies." *Social Science Research* 40(3): 822–40. DOI: <https://doi.org/10.1016/j.ssresearch.2010.09.012>.
- Zhou, Shelly, Elizabeth Page-Gould, Arthur Aron, Anne Moyer, and Miles Hewstone. 2019. "The Extended Contact Hypothesis: A Meta-Analysis on 20 Years of Research." *Personality and Social Psychology Review* 23(2): 132–60. DOI: <https://doi.org/10.1177/1088868318762647>.