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Implications for the Self Determine Benevolence and Self-Protection in Intergroup Relations

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Abstract

People often favor groups they belong to over those beyond the in-group boundary. Yet, in-group favoritism does not always occur, and people will sometimes favor an out-group over the in-group. We delineate theoretically when in-group favoritism (i.e., self-protection) and out-group favoritism (i.e., benevolence) should occur. In two experiments, groups' relative status and competence stereotypes were manipulated; groups' outcomes were non-contingent in Experiment 1 and contingent in Experiment 2. When allocating reward, members of a low status group were selfprotective, favoring the in-group over the out-group under both non-contingent and contingent outcomes. Those with high status benevolently favored the out-group when outcomes were noncontingent, but were self-protective with contingent outcomes. People were willing to engage in social activities with an out-group member regardless of competence. However, when task collaboration had implications for the self, those with low status preferred competent over less competent out-group members. Traits of high status targets were differentiated by those with low status in both experiments, whereas those with high status differentiated low status members' traits only when outcomes were contingent. A general principle fits the data: the implications of intergroup responses for the self determine benevolence and self-protection. Implications for the Self Determine Benevolence and Self Protection in Intergroup Relations

Keywords

self; intergroup relations model; in-group favoritism; out-group favoritism; benevolence; self-protection

"Subtle forms of bias build understandings that protect the self. Whites' racial attitudes have changed over the century, but mostly in ways that protect the self-image as egalitarian." (Fiske, 2004, p. 455)

Group membership was once deemed sufficient to engender intergroup conflict because of the implications for the self (Sumner, 1906). As social cognitive theory developed, Tajfel and Turner (1979) proposed that one's identity and self-esteem are offspring of group membership, and consequently, people favor the in-group over the out-group to protect and enhance the self. Indeed, data document in-group favoritism (e.g., Bettencourt, Dorr, Charlton & Hume, 2001; Brewer, 1979; Messick & Mackie, 1989; Mullen, Brown, & Smith 1992; Pratto et al., 2013; Tajfel, 1982). In a functionalist analysis, Gaertner and Insko (2000)

proposed that in-group favoritism is a hedonic strategy benefiting the self because people expect in-group reciprocity. Employing a cognitive model of inductive reasoning, DiDonato, Ulrich and Kruger (2011) showed that people project their positive self-attitudes to the ingroup. Although spanning a century, and sometimes conflicting axiomatically, these propositions all share a common principle; implications for the self are at the core of intergroup responses. We use the term *self-protection* to reflect the positive implications for the self of favoring the in-group over an out-group.

Although people sometimes protect the in-group, including the self, in order to attain material or social resources (Scheepers et al., 2002; 2006), they sometimes favor the outgroup (Brewer, 1979; Fiske, 2004; Harber, Stafford, & Kennedy, 2010; Malloy, 2008; 2013) to display egalitarianism. We use the term *benevolence* to reflect the positive implications for the self of publicly favoring an out-group over an in-group (Fiske, 2004; Harber, Stafford & Kennedy, 2010).

Intergroup benevolence has been largely neglected with an emphasis on self-protection and out-group derogation, and this research refines the theoretical focus. A basic proposition of the Intergroup Relations Model is that when groups have an equal opportunity for attaining material and social resources, positive intergroup behavior can result. Under inequality, self-protection is expected (Malloy, 2008). The Intergroup Relations Model predicts that benevolence and self-protection are determined, in part and most proximally, by groups' relative status, their perceived competence and the consequences for the self in an intergroup interaction.

Although people will sometimes favor an in-group over an out-group, a meta-analysis of minimal groups found little evidence for in-group favoritism, or out-group derogation. Jetten, Spears and Postmes (2004) concluded "the empirical findings are not completely conclusive and some have questioned whether there is unequivocal support for this hypothesis" (p. 863). While seemingly inconsistent with social identity theory, it is not surprising because out-group responses are not simply a matter of categorization. They are influenced by group-based identity, coupled with features of the intergroup encounter including: identification with the in-group, the self-relevance of intergroup responses, the impact of the out-group on the in-groups' outcomes (i.e., outcome contingency), and the cooperative-competitive nature of the interaction (Tajfel & Turner, 1979). An evaluation of 60 tests of these moderators failed to support them, although in-group identification was an exception (Jetten, et al., 2004). Those highly identified with their group displayed in-group favoritism on trait ratings and reward allocation. Thus, the data germane to in-group favoritism are mixed with both supportive (Bettencourt, Dorr, Charlton & Hume, 2001; Brewer, 1979; Messick & Mackie, 1989; Mullen, Brown, & Smith 1992; Tajfel, 1982) and non-supportive (Jetten, Spears & Postmes, 2004) findings. Consequently, an analysis of the conditions producing self-protection and benevolence in intergroup relations extends the theoretical focus.

A theoretical analysis of moderators of intergroup responses derived from Realistic Conflict Theory (RCT, Campbell, 1965; Levine & Campbell, 1972; Sherif, 1966), Social Identity Theory (SIT, Tajfel & Turner, 1979), and the Intergroup Relations Model (IRM, Malloy,

2008) is developed. All situate the implications of groups' outcomes for the self at the core of intergroup responses. This analysis is also informed by the stereotype content model (Fiske, Cuddy, Glick, & Xu, 2002) because it addresses the self-relevance of out-group stereotypes.

Realistic Conflict, Social Identity, and the Intergroup Relations Model

Realistic Conflict and Social Identity Theories are sometimes judged erroneously as incompatible. Realistic Conflict Theory maintains that groups are motivated to procure resources providing an in-group advantage that is self-protective. Social Identity Theory is not a conceptual adversary of Realistic Conflict Theory because each explains different functions of intergroup responses under specific socio-cultural, psychological, and strategic conditions (Scheepers, Spears, Doosje & Manstead, 2002; 2006). A unifying theme is that intergroup responses are motivated (Scheepers, Spears, Doosje & Manstead, 2003), typically in service of self-enhancement (Harber, Stafford & Kennedy, 2010) and protection of the self and one's collective (Sidanius & Pratto, 2001). Tajfel and Turner (1979) emphasized the compatibility of RCT and SIT stating "the theoretical orientation to be outlined here is intended not to replace R.C.T., but to supplement it in some aspects that seem to us essential for an adequate social psychology of intergroup conflict" (p. 34). An extension by Scheepers, Spears, Doosje and Manstead (2002) proposed that Realistic Conflict and Social Identity Theories have different ranges of convenience, and that each is capable of explaining intergroup responses in different contexts. Scheepers et al. (2002; 2006) argue that in different contexts in-group favoritism serves an instrumental function related to reward attainment, or an identity function related to self-enhancement. In contexts where groups' outcomes have no implications for the self, in-group or out-group favoritism can serve an identity function. For example, favoring the in-group may enhance its status and ultimately benefit the self (Scheepers et al., 2006). However, favoring the out-group may establish the benevolence and egalitarianism of one's in-group in the public square. This recognition can extend the theoretical analysis of intergroup relations to explain both benevolence and self-protection.

The Intergroup Relations Model (Malloy, 2008) borrows propositions from Realistic Conflict (Campbell, 1965; Levine & Campbell, 1972), Social Identity (Tajfel & Turner, 1979) theories, and motivational models of intergroup relations (Fiske, 2004; Scheepers, et al., 2006) to specify when benevolence and self-protection should occur. The IRM assumes that identity is determined, in part, by membership in a collective and that people are motivated to view the in-group positively because of the implications for the self. The model also acknowledges that categorization alone will not necessarily lead to biased perception, trait judgments and action (Brewer, 1999; Jetten, Spears, & Postmes, 2004) because intergroup responses are moderated by the opportunity to achieve material (e.g., income) and social (e.g. positive social identity) resources. With an equal opportunity (i.e., groups' outcomes are non-contingent) intergroup responses are predicted to be benign, and in some cases, the out-group will be favored over the in-group in service of self enhancement. With higher relative status, benevolence that does not jeopardize resource attainment enhances the benefactor's social identity (Harber, Stafford, & Kennedy, 2010; Harber et al., 2012). Out-group benevolence also circumvents group based shame when the less fortunate are ignored

(Shepherd, Spears & Manstead, 2013a), particularly when a groups' high status is stable (Shepherd, Spears & Manstead, 2013b). We extend this analysis by considering the joint effects of in-group status and out-group stereotypes.

Consider the following data. In societies where immigrants are a small fraction of the population, there is stronger support for social welfare than in countries with large immigrant communities (Alesina, Devleeschauwer, Easterly, Kurlat, & Wacziarg, 2003). There is an inverse relationship between racial diversity (termed *fractionalization* by economists) and spending on welfare programs. Belgium has very low racial diversity and expends a relatively high percentage of the gross domestic product on social welfare. In Peru, the reverse is true. In the United States, as the percentage of Blacks in a state increases expenditure on welfare benefits decreases. Benevolence under low racial diversity occurs because the lower status out-group does not threaten in-group resource attainment (Sidanius & Pratto, 2001; Esses, Deaux, Lalonde, & Brown, 2010), establishes the majority groups' egalitarianism (Harber et al., 2012; Scheepers, Branscomb, Spears & Doosje, 2002), and prevents group-based shame (Shepherd et al., 2013a, 2013b).

An in-group facing a competent out-group that threatens resource attainment should respond with perceived superiority, negative stereotyping, malevolent feelings, and discrimination (Malloy, 2008). A high status group seeks to maintain its relative privilege (Scheepers & Ellemers, 2005; Sidanius & Pratto, 2001), while a lower status group attends vigilantly for opportunities to garner a larger portion of the material and social rewards (Campbell, 1965; Fiske, 2010; Scheepers et al., 2006; Sherif, 1966; Tajfel & Turner, 1979). When groups' outcomes are contingent and unequal, self-protective in-group favoritism should be evident in intergroup responses (Bettencourt, Dorr, Charlton, & Hume, 2001; Malloy, 2008; Mullen, Brown & Smith, 1992).

Experiments 1 and 2 simulate these theoretical accounts. We delineate conditions producing benevolence (i.e., out-group favoritism) and self-protection (i.e., in-group favoritism) by considering the joint effects of relative group status, out-group competence stereotypes, and outcome contingencies on intergroup behavior (reward allocation), approach to the out-group for task collaboration and social interaction, and trait judgments of the in- and out-group.

Origins of Self-Protection and Benevolence

Members of a low status group strive to achieve a more positive self-identity and display stronger in-group favoritism than members of advantaged groups (Leach, Spears, Branscombe, & Doosje, 2003; Mullen, Brown, & Smith, 1992). When members of a low status group can enhance their identity by favoring it, self-protection is expected (Scheepers et al., 2002; 2006).

Sometimes a high status group will benevolently favor the lower status out-group. When evaluating academic performance (writing an essay), those from a high status group (Whites) evaluated the performance of a lower status out-group (Blacks) more positively than the in-group (Harber, 1998; 2004; Harber, Gorman, Gengaro, Butisingh, Tsang,

Ouellette, 2012). When rating personality traits of in-group and out-group members, both Blacks and Whites rated the out-group more favorably than the in-group (Malloy, 2013). However, these demonstrations of benevolence occurred only under non-contingent group outcomes that did not threaten the in-groups' resource attainment. Had this been the case, benevolence should have been tempered.

These findings raise a theoretical question that does not have an adequate empirical answer: When will benevolence and self-protection occur? Three constructs of the Intergroup Relations Model (Malloy, 2008) are predicted to moderate intergroup responses; they are groups' outcome contingencies, relative status and group stereotypes.

Groups' Outcome Contingencies

The contingency of groups' outcomes is predicted to moderate intergroup responses (Malloy, 2008). With an equal opportunity to attain resources, the Intergroup Relations Model predicts that perceived in-group superiority will be tempered, stereotypes will be attenuated, and intergroup attitudes will be neutral or positive. Discrimination should be absent and benevolence is possible (Rosenthal & Levy, 2012). When the opportunity for resource attainment is not equal, perceived superiority, negative stereotypes, intergroup avoidance, and attendant discrimination should occur. Self-protection is expected. In Experiment 1 groups' outcomes were non-contingent whereas in Experiment 2 they were contingent. Because participants had to keep three key pieces of manipulated information in mind (in-group status, out-group status and the out-group competence stereotype), adding a contingency manipulation could have placed a cognitive burden on participants that could produce random error in responding. For this reason, outcome contingencies were manipulated at the level of study rather than at the level of participants.

Relative Group Status

Our experimental manipulation of status (high or low) produced impermeable group boundaries (Ellmers, Wilke & van Knippenberg, 1993) based on the alleged accuracy of performance on a perceptual task (i.e., dot estimation) that was linked to personal outcomes (e.g. career success). Low status groups should allocate disproportionate reward to the ingroup to enhance its status and benefit the self (Bettencourt et al., 2001; Scheepers et al., 2006; Mullen et al., 1992; Tajfel & Turner, 1979). For low status groups, self-protective ingroup favoritism is expected under both contingent and non-contingent outcomes because low status threatens a positive social identity, and reduces the likelihood of material reward. If a member of a low status group favored an advantaged out-group, in-group members would reject the individual (Scheepers, Branscombe, Spears & Doosje, 2002), or use social influence to alter that behavior (Sherif, Sherif, & Nebergall, 1965).

In contrast, those with high status are motivated to appear egalitarian to themselves (Carver, Glass, & Katz, 1978) and others (Devine, Monteith, Zuwerink, & Elliot, 1991; Dutton & Lake, 1973; Fiske, 2004; Gaertner & Dovidio, 1986; Shepherd, 2013a; 2013b); out-group benevolence meets these motives (Harber, Stafford & Kennedy, 2010). Yet, demonstrations of out-group favoritism have not considered the consequences of benevolence for the self.

The Intergroup Relations Model predicts that when benevolence has no consequence for resource attainment, those with high status should favor the out-group over the in-group (Malloy, 2008). However, with contingent outcomes and a gain by one heightens the probability of a loss by the other, those with high status should favor their in-group; particularly when the out-group is perceived as a competent competitor (Fiske, Cuddy, Glick & Xu, 2002). The motivation to maintain higher relative status (Scheepers & Ellemers, 2005; Sidanius & Pratto, 2001), and a positive group-based identity (Tajfel & Turner, 1979), should trump benevolence under outcome contingency.

Stereotype Content

Out-groups are construed differently based on objective facts and cognitive illusions, and the stereotype content model (Fiske, et al., 2002) clarifies when benevolence or self-protection will occur. This model assumes that out-groups are evaluated on the basis of their intentions toward the in-group (i.e., warmth), and their ability to enact them successfully (i.e., competence). Durante, Fiske, Kervyn and others (2013) demonstrate that (worldwide) out-groups perceived as competent are also perceived as threatening to the in-group. Particularly relevant are two clusters of groups; those that are less competent and pose little challenge, and those posing a real competitive threat. In the present research, we manipulated competence stereotypes of the out-group because we expected they would moderate intergroup responses.

Hypotheses

Reward allocation

When groups' outcomes are non-contingent, benevolent out-group favoritism by members of a high status group should be observed (Hypothesis 1) because benevolence does not threaten resource attainment, enhances self-esteem (cf. Harber, Stafford, & Kennedy, 2010), and prevents group-based shame (Shepherd et al., 2013a; 2013b). In contrast, low status groups should favor the in-group when outcomes are non-contingent or contingent (Hypothesis 1a). For low status groups, Realistic Conflict Theory, Social Identity Theory and the Intergroup Relations Model converge and predict self-protection of material reward (Brewer & Campbell, 1976; Campbell, 1965; Sherif, 1966) and enhancement of the in-group and the self (Tajfel & Turner, 1979).

Moderation of the status effect by out-group stereotypes was expected. When an out-groups' high status is unjustified by behavior incompatible with that outcome (e.g. career success despite incompetence as a student), those with low status should display uniquely high levels of in-group favoritism (see Bettencourt, Dorr, Charlton, & Hume, 2001; Ellmers, Wilke & van Knippenberg, 1993). Those with low status should favor the in-group most strongly when allocating reward to a high status out-group that is stereotyped as low on competence (Hypothesis 1b). In this case, high status is anointed rather than earned and simulates "White Privilege" in race relations in the United States. When an out-group is stereotyped as competent and capable of threatening the in-group's resource attainment, both low and high status groups should display in-group favoritism when outcomes are contingent (Hypothesis 2).

Intergroup approach

Implications for the self should impact approach to, and avoidance of, out-groups. Avoiding a less competent out-group member socially would evidence unjustified bias (Shepherd et al., 2013a; 2013b). However, avoidance would be considered rational and justified when task collaboration would have negative implications for the self. There should be an interaction between the nature of the intergroup contact (task or social relations; Tajfel & Turner, 1979), the status of the in-group and the perceived competence of the out-group. Hypothesis 3 expected willingness among those with high and low in-group status to interact socially with out-group members regardless of their competence. Hypothesis 3a expected members of a low status group to be more willing to collaborate on a task with competent than with less out-group members under non-contingent and contingent group outcomes.

Perceiver Variance Components in Intergroup Trait Judgments

Participants received scant information when rating in-group and out-group members' personality traits. Identified only by initials, perceivers knew the target's status, competence stereotype and the contingency of groups' outcomes. In this situation, any structure in the trait rating data had to be imposed by the perceiver as a function of the information about the in-group and out-group.

Hypothesis 4 predicted that members of a low status group would differentiate the traits of positively (competent) and negatively (less competent) stereotyped out-group targets equally under outcome contingency and non-contingency. Low status engenders differentiation of others' characteristics to maximize reward for the self that is often under the control of another with high status (Fiske, 2010; Malloy et al., 2011; Miller & Malloy, 2003).

In contrast, under outcome contingency members of a high status group should make greater differentiations of the traits of competent than less competent out-group members (Hypothesis 4a). This should occur because a competent out-group is a realistic threat to the in-group and the self (Fiske, 2010; Fiske et al., 2002). Tests of Hypotheses 4 and 4a required data from both experiments and will be presented in Study 2. All hypotheses are summarized in Table 1.

STUDY 1: NON-CONTINGENT GROUP OUTCOMES

Study 1 focused on the effects of relative group status and out-group competence stereotypes on in- and out-group responses when groups' outcomes are non-contingent. Creation of groups in the laboratory permitted assessment of the effects of these variables on intergroup responses in the absence of previous experience or specific group expectations.

Method

Participants—Sixty undergraduates (41 female) at an urban university in New England (U.S.A.) participated in a study of "visual perception and life outcomes" for course credit and participated individually. The mean age was 21.87 (18 to 42).

Procedures

Group formation: Participants estimated the number of dots (always > 99) within a circle on a computer screen. There were 3 practice trials followed by 30 additional trials. Participants were told their responses were sent to a server in another laboratory to be recorded and scored. A researcher returned with a warm sheet of paper "hot off the printer" showing a normal curve and the participant's dot estimation accuracy indicated on the X axis. Based on random assignment, participants were told that relative to other college students, their estimation performance was at the 91st or the 9th percentile. This accomplished group formation.

Group status manipulation: Participants were then told that a psychologist at the University of Connecticut (a prestigious university in the region) established a link between dot estimation skill and performance in one's first job following college graduation. Accurate estimators at the 91st percentile were told that members of their group have average starting salaries of \$58,000, advance rapidly in their careers, and are respected by professional peers. Inaccurate estimators at the 9th percentile were told that members of their group have average starting salaries of \$26,000, do not advance rapidly in their careers, and don't gain the respect of professional peers. These contrived results accomplished the group status manipulation.

Out-Group stereotype (competence) manipulation: Based on random assignment, half of the participants were told that their out-group can be characterized as highly motivated students, who are serious about their school work, study more than the average college student, and have average GPA's of 3.53 (out of 4.00) at graduation. This information stereotyped the out-group as competent. The remaining participants were told that their out-group can be characterized as unmotivated students, who are not serious about their school work, study less than the average college student, and have average GPA's of 2.03 at graduation. The out-group in this case was stereotyped as less competent.

Dependent Measures

Reward allocation: Participants were told that in future studies the dot estimation procedure would be modified and their assistance was requested. Unlike their own experience with no feedback, the new procedure entails performing the task with varying amounts of feedback on the accuracy of dot estimation across trials that will increase accuracy. Participants were asked to decide how much feedback should be awarded to two "randomly selected" future participants (in fact, one in-group and one out-group member) by assigning the number of trials on which feedback would be provided. Choices for in-group and out-group feedback allocation were: 1/19, 3/18, 5/17, 7/16, 9/15, 11/14, 13/13, 15/12, 17/11, 19/10, 21/9, 23/8, and 25/7, respectively. Reward allocation scores were the difference between in-group and out-group allocations and ranged from –18 (maximum benevolent out-group favoritism) to +18 (maximum in-group self-protection) with 0 representing equal allocation.

<u>Intergroup approach:</u> Participants were asked to report their willingness to interact with a member of their out-group on task and social activities. Ratings were made on bipolar 9

point scales (1–9) with appropriate descriptors for endpoints (e.g. highly unlikely – highly likely). The indicators of intergroup approach on task and social activity constructs are presented in Table 3. Reliabilities (coefficient alpha) for the task and social activity constructs in Study 1 were .74 and .76, respectively.

Trait ratings: Most research on intergroup trait perception has focused on mean ratings; while important, an alternative method utilizes variance components to assess them (Malloy, 2013; Malloy, 2008; Malloy, Ristikari, Berrios-Candelaria, Lewis, & Agatstein, 2011). This method partitions variance in intergroup trait judgments into perceiver, target group and perceiver by group sources that quantify different perceptual phenomena. In a study of trait judgments of White and Black men following 20 minute face to face interactions, mean trait judgments were equivalent. Variance component analysis revealed that Black men, with presumably lower status, differentiated the traits of White men to a greater extent than White men differentiated Blacks' traits (Malloy et al., 2011). Of particular interest is the perceiver variance component that quantifies in-group members' personal stereotypes of out-group members' traits (Malloy, 2008). Perceiver variance is not to be confused with out-group homogeneity. Perceiver variance emerges when a perceiver rates out-group targets similarly, but differs from other perceivers rating the same targets. Hypothetical data in Table 2 display a pattern in which all of the variance in out-group ratings is due to differences between perceivers when responding to the same targets. When an in-group member judges outgroup members as having the same standing on traits (i.e., targets are undifferentiated), yet differs from other in-group members when rating the same targets, the magnitude of the perceiver variance component increases. This is exactly the pattern presented in Table 2. If all members of one group judged all members of an out-group negatively and identically (i.e., maximum out-group homogeneity) the perceiver variance would equal zero.

Participants were instructed to "think about the personality characteristics of people who are highly accurate, average or highly inaccurate dot estimators. Based on the limited information we have given you, we want you to describe the traits of six people who are highly accurate, average, or highly inaccurate dot estimators. We will not give you names, only peoples' initials. The people you will rate were selected randomly." In fact, participants were presented with three in-group and three out-group targets arranged in a random order for each participant. Trait ratings were based on the Big Five (John, 1990) factor structure and each factor had three indicators. Bipolar 9 point scales (1–9) were used and endpoints were defined by appropriate adjectives. The extroversion factor (I) was indicated by introverted-extroverted, quiet-talkative, shy-outgoing; the agreeable factor (II) was indicated by disagreeable-agreeable, uncooperative-cooperative, and discourateous-courateous; the conscientiousness factor (III) was indicated by lazy-hardworking, not studious-studious, and unmotivated-motivated; the emotional adjustment factor (IV) was indicated by nervous-calm, insecure-secure, and sad-happy; the intelligence factor (V) was indicated by unintelligent-intelligent, uncreative-creative, and concrete-abstract.

Research Design and Analyses—The design was a 2 (high – low in-group status) \times 2 (competent – less competent out-group stereotype) factorial and participants were assigned to conditions randomly with the constraint of n = 15 per cell. Reward allocation was

analyzed using planned contrasts. Approach to the out-group was analyzed using mixed model ANOVA with the task and social activity constructs as repeated factors. Trait judgments were analyzed using variance component analysis (Malloy, 2008; Malloy & Albright, 1990).

Results and Discussion

Manipulation Checks—After measurements were taken, participants were asked two questions to assess their understanding of the experimental manipulations. To assess the ingroup status manipulation, we asked "Who are the best students while in college?" The choices were "accurate" and "inaccurate" dot estimators. Ninety five percent of the respondents answered correctly (3 in the inaccurate estimator group answered erroneously). We also asked "Who has the most positive life outcomes after college?" and 90% of respondents were correctly aware of the out-group competence manipulation (respectively, 4 and 2 in the competent and less competent out group stereotype conditions were incorrect). All data were included in analyses.

Reward Allocation—Hypotheses 1 and 1a were evaluated using focused contrasts. Supporting Hypothesis 1, results confirmed that members of a high status group displayed out-group favoritism when responding to competent and less competent out-group members (means of -6.80 with 95% confidence interval (CI) of -2.91: -10.69 and -7.00 with 95% CI of -3.11: -10.89, respectively). Mean reward allocation by those with high status of -6.90 revealed out-group favoritism that was reliably different from zero (i.e., no bias) with t(29) = -5.17, p < .001 and Cohen's d = -1.92. Moreover, in support of Hypothesis 1a, results confirmed that members of a low status group displayed self-protective in-group favoritism when responding to both competent and less competent out-group members (+3.00 with 95% CI of -.89: +6.89 and +10.60 with 95% CI of +6.71: +14.49, respectively). Mean reward allocation of +6.80 by those with low status revealed in-group favoritism that was reliably different from zero with t(29) = 4.43, with p < .001 and d = +1.65. These results are presented in Figures 1. When groups' outcomes were non-contingent, the high status group was benevolent, and the low status group was self-protective.

However, moderation of intergroup responses by out-group stereotypes was expected. In support of Hypothesis 1b, members of a low status group were most strongly self-protective when the high status out-group was stereotyped as less competent and unjustly advantaged (i.e., the condition simulating "White Privilege"). In fact, a privileged out-group (i.e., high status) with unjustified high status (i.e., less competent) engendered the strongest level of ingroup favoritism with mean reward allocation of +10.60 among those with low status. This mean was reliably different from zero (t(14) = 6.86, p < .001), deviated substantially from this value (t(14) = 0.60) and was reliably different from reward allocation (t(14) = 0.86) to high status, competent out-group members (t(14) = 0.86).

Intergroup Approach—A 2 (high or low in-group status) \times 2 (competent or less competent out-group stereotype) \times 2 (task and social activity) ANOVA was computed; intergroup approach constructs were repeated. There was no three-way interaction with F(1, 56) = .73, p = .40 with $\eta^{2'} = .01$. A main effect showed (F(1, 56) = 18.14, p < .000 with $\eta^{2'}$

= .25) greater approach to out-groups on the social activity dimension than on the task dimension (means of 5.82 and 5.14, respectively). This main effect was moderated by the out-group stereotype (F(1, 56) = 33.43, p < .000 with $\eta^{2'} = .37$). Social approach was equivalent statistically for competent and less competent groups with means of 5.95 and 5.69, respectively; 95% CI were 5.47: 6.42 and 5.21: 6.17, respectively. Desire to collaborate on a task with implications for the self was greater under a positive than under a negative stereotype (means of 6.19 and 4.10, respectively; 95% CI were 5.62: 6.76 and 3.53: 4.67, respectively. These results (Figure 2) supported Hypothesis 3 and 3a. Under non-contingent outcomes, participants were willing to engage in social activities with a less competent outgroup member, but were less willing to collaborate with them on a task impacting personal outcomes.

STUDY 2: CONTINGENT GROUP OUTCOMES

Results of Study 1 generalize only to groups with non-contingent outcomes. Because the Intergroup Relations Model (Malloy, 2008) predicts that intergroup relations should be self-protective when outcomes are contingent, Study 2 was conducted. This study was identical to Study 1 except that we tested hypotheses regarding reward allocation, intergroup approach and trait perceptions under outcome contingency.

Hypotheses

Reward allocation—Hypothesis 2 was untested in Study 1. When groups' outcomes are contingent, and the out-group is stereotyped as competent (i.e., capable of threatening ingroup resource attainment), the IRM predicts that both low and high status groups should be self-protective (Hypothesis 2).

Intergroup approach—Under non-contingent and contingent outcomes, because of motivation to enhance relative status (Ellemers et al., 1993; Scheepers et al., 2002; 2006; Tajfel & Turner, 1979), members of a low status group should show greater approach to competent than to a less competent out-group members for task collaboration (Hypothesis 3a). Similarly, members of a high status group should also show greater approach to competent than to less competent out-group members for task collaboration because of the implications for personal outcomes (Hypothesis 3b).

Method

Participants—Sixty undergraduates (35 female and 1 not reported) from the same population as Study 1 participated in a study of "visual perception and life outcomes." The mean age was 20.93 (range 18 to 41) and participants received course credit. They were run through the experiment individually.

Procedures and Measures—Procedures and measures in Study 2 were identical to Study 1 except the following. At the point where reward (i.e., feedback on estimation accuracy) was to be allocated, participants were told that all future participants in the study (but not including the present participant) would complete it in two phases. In phase 1 of the future procedure, the dot estimation task would be performed, and then in phase 2, dot

estimation would occur with feedback regarding accuracy of estimation. The participant was told that this feedback in Phase 2 would improve dot estimation accuracy. The participant was further told that a \$100 dollar gift certificate will be available for the group (i.e., accurate or inaccurate dot estimators) that improves the most on the task during phase 2 with performance feedback. We explained that the prize would be available to all participants (including the current participant who was aware of her/his dot estimation accuracy) who completed the task under the current procedure, and the new procedure. The group (i.e. accurate or inaccurate dot estimators) that improved the most would be entered into a lottery, and one name would be selected randomly to win the prize. This procedure created outcome contingency. If the out-group improved more than one's in-group, there was no chance of winning the prize. In the debriefing we explained truthfully that all participants would be entered and one name would be drawn to win the prize.

Results and Discussion

Manipulation Checks—After measurements were taken, participants were asked three questions to assess their understanding of the information they received in the experiment. To assess the in-group status manipulation, we asked "Who are the best students while in college?" The choices were "accurate" and "inaccurate" dot estimators. Ninety eight percent of the respondents answered correctly (1 error in the accurate estimator group). We also asked "Who has the most positive life outcomes after college?" and 100% of respondents were accurately aware of the out-group competence manipulation. To determine if the outcome contingency was understood, we asked "If your group shows more improvement on the second session of the dot estimation task, which group will be eligible for the gift certificate?" Correct responses were given by 100% of participants. All data were included in analyses.

Reward Allocation—Focused contrasts evaluated Hypothesis 2. Reward allocation declined when the intergroup context changed from non-contingency (Study 1) to contingency (Study 2) for high status groups with a 48% decrease in out-group favoritism (-6.90 in Study 1 and -3.30 in study 2). When the out-group was positively stereotyped as competent, benevolence was absent among those with high status (mean of -1.60 that did not differ from zero, one sample t(14) = .75, p = .14, d = .26, with 95% CI = -5.51: +2.32). Importantly, when the out-group was stereotyped as less competent, even under outcome contingency, benevolence remained among those with high status (mean of -5.00 was different from zero, one sample t(14) 2.45, p = .03, d = .86 with 95% CI = -1.09: -8.92).

In contrast, members of a low status group were self-protective when the higher status outgroup was stereotyped as competent (+7.00 was different from zero, t (14) = 4.25, p = .001, d = 1.50, with 95% CI = +3.09: +10.92)) or less competent (+6.00 was different from zero, t (14) = 3.06, p = .009, d= 1.09, with 95% CI = +2.09: +9.92). Figure 3 presents these results. This result for those with low status replicated Study 1 again supporting Hypothesis 1a.

When outcomes were contingent and the out-group was stereotyped as competent, low status members showed a 175% increase in self-protection in reward allocation compared to when outcomes were non-contingent (+3.00 and +7.00 in Studies 1 and 2, respectively). Results

also supported Hypothesis 2. Under contingency, those with high status shifted from benevolence to self-protection when the out-group was competent, yet remained benevolent when the out-group was less competent. As expected, members of a low status group were self-protective regardless of the out-group competence stereotype.

Intergroup Approach—Reliabilities for the task and social approach constructs were r = ...84 and r = .82 in Experiment 2. A 2 (high or low in-group status) \times 2 (positive or negative out-group stereotype) × 2 (task or social activity) ANOVA was computed; the last was a repeated factor. A 3 way interaction with F(1, 56) = 6.05, p = .02, and partial eta squared (η^2) of .10 emerged. To decompose this interaction, 2 (low-high in-group status) \times 2 (positive-negative out-group stereotype) ANOVA's were computed for the task and social activity constructs, separately. An interaction of in-group status and the out-group stereotype was observed for intergroup approach on the task factor with F(1, 56) = 8.11, p = .006; η^2 = .13. Providing additional support for Hypothesis 3a, members of a low status group were more willing to collaborate on a task with a competent (mean of 7.07 with 95% CI of 6.25: 7.88) than with a less competent out-group member (mean of 3.84 with 95% CI of 3.02: 4.66). Members of a high status group were equally willing to cooperate on a task with a competent (mean of 5.18 with 95% CI of 4.37: 5.99) and a less competent (mean 4.27 with 95% CI of 3.45: 5.08) out-group member. This equality failed to support Hypothesis 3b where we expected those with high status to be more willing to collaborate on a task with a competent than with a less competent out-group member under outcome contingency. These results are presented in Figure 4. There was no in-group status by out-group stereotype interaction effect on social approach under outcome contingency $(F(1,56) = .66, p = .42, \eta^2)$ = .01); the grand mean across conditions was 5.99 (95% CI of 5.66: 6.32), and offered additional support for Hypothesis 3.

Perceiver Differentiation of Targets' Traits—Fixed, rather than random, perceiver variance components (Malloy & Kenny, 1986) in ratings of out-group targets were estimated in each of the eight cells of Studies 1 and 2 and are summarized in Table 4. Variance ratios prescribed by Hypotheses 4 and 4a were computed and compared to the critical value of F with 14 dF in the numerator and denominator. In support of Hypothesis 4, perceiver variances among members of the low status group were equivalent statistically when rating the traits of positively and negatively stereotyped out-group targets under non-contingent (28.21 and 36.27, respectively) and contingent (29.17 and 28.30, respectively) outcomes. Similarly, perceiver variances among members of a high status group were equivalent when rating the traits of out-group targets stereotyped as competent and less competent under non-contingency (22.74 and 21.79, respectively). However, under outcome contingency, those with high status demonstrated greater differentiation (i.e., less perceiver variance) of competent than less competent out-group members' traits (15.57 and 43.54, respectively with F(14, 14) = 2.80, p < .05). These results supported Hypothesis 4a.

General Discussion

Although self- protective in-group favoritism has been observed (Bettencourt, Dorr, Charlton & Hume, 2001; Brewer, 1979; Ellmers et al., 1993; Messick & Mackie, 1989; Mullen, Brown, & Smith 1992; Scheepers et al., 2002; 2006; Tajfel, 1982), a meta-analytic

integration of the literature questioned the generality of the phenomenon (Jetten, Spears & Postmes, 2004). Jetten and colleagues (2004) concluded "the empirical findings are not completely conclusive and some have questioned whether there is unequivocal support for this hypothesis" (p. 863). This theoretical tension motivated refinement of existing theories of intergroup behavior, and the present results delineated when self-protection or benevolence will occur.

Relative Status and Intergroup Responses—Members of high and low status groups navigate the social world with different perspectives and motivation that produce asymmetric intergroup responses (Malloy et al., 2011). Those with high status wish to maintain a privileged position (Fiske, 2010; Tajfel & Turner, 1979; Scheepers & Ellemers, 2005; Sidanius & Pratto, 2001), but are also motivated to appear egalitarian (Fiske, 2004; Harber et al., 2010). When groups' outcomes were non-contingent, benevolence by high status group members was observed. Yet, when outcomes were contingent and the out-group was competent, their benevolence receded and shifted toward self-protection.

The social psychology of a low status group was different; self-protection in reward allocation was observed when groups' outcomes were non-contingent and contingent. This finding was predicted by a basic premise of social identity theory that lower status groups strive to increase their standing relative to other groups and alter the prevailing social reality (Tajfel & Turner, 1979; Scheepers et al., 2006). Empirical support for in-group favoritism exists (Branscombe, Ellemers, Spears & Doosje, 1999; Brewer & Campbell, 1976; Brown & Abrams, 1986; Jetten, Spears, & Manstead, 1997; Mullen, Brown, & Smith, 1992), yet its generality has been questioned (Jetten et al., 2004). The present data offer some clarification. Mere categorization or status differences were not sufficient to engender in-group favoritism in behavior, social approach and trait judgments. Importantly, the consequences for one's own outcomes were the basis for in-group and out-group responses. When one's own reward was not yoked to an out-group response, those with high status displayed benevolence. They evidenced self-protection only when in competition for the same resources with a competent out-group. In contrast, self-protection among those with low status was observed regardless of groups' outcome contingencies. These findings supported basic predictions of the Intergroup Relations Model (Malloy, 2008).

Relative Status and Competence Stereotypes in Intergroup Responses—When high status out-group members were stereotyped as undeserving of their privileged position, there were uniquely high levels of self-protection among those with low status. We created a condition where members of a low status group faced inequality of opportunity for resource attainment, and effort was not a prerequisite for success for those with high status. Success was illegitimate. Theoretically, this condition should produce the highest levels of intergroup tension and conflict (Malloy, 2008); empirically, it caused the strongest in-group favoritism. This effect was engendered in the laboratory context among groups existing only within it, and highlights the strong effect of illegitimate privilege on intergroup conflict. Strategies that promote equality of opportunity and linkage of outcomes to effort for all groups have the potential to promote intergroup reconciliation and peaceful coexistence (Nadler, Malloy & Fisher, 2008).

Relative Status, Competence Stereotypes and Outcome Contingencies—

Reward allocations by members of high and low status groups were affected by groups' competence stereotypes and the contingency of outcomes. Participants in high status conditions evidenced a shift from benevolence (Study 1) to self-protection when the outgroup was competent and groups' outcomes were contingent (Study 2). Importantly, when the out-group was less competent, those with high status displayed benevolence under both contingent and non-contingent outcomes. The National Philanthropic Trust (https://www.nptrust.org/philanthropic-resources/charitable-giving-statistics) reported that Americans provided about 353 billion dollars in charitable giving in 2015, documenting that the advantaged will support the less advantaged. Harboring in-group resources when the outgroup is disadvantaged engenders shame that attenuates in-group favoritism (Shepherd et al., 2013a; 2013b). In a striking contrast, regardless of outcome contingencies or stereotypes, members of a low status group were consistently self-protective supporting Social Identity Theory.

Resource allocation to in- and out-groups in a laboratory context where group identity, status, and stereotypes were created experimentally simulated natural intergroup relations. When immigrants are a small fraction of the population with relatively low status, support for social welfare programs is higher than when out-group members are a larger portion of the population (Alesina et al., 2003). Resource allocation is maximized when the out-group has lower relative status, and is less capable of competing with the in-group. Although favorability toward a lower status out-group has been observed (Carver, Glass, & Katz, 1978; Devine, Monteith, Zuwerink, & Elliot, 1991; Dutton & Lake, 1973; Harber, et al., 2010; Malloy 2013), the present experiments demarcate when benevolence will and will not occur. Allocation of resources to a less capable out-group is most likely when it does not threaten resource attainment by the in-group (the present data), and enhances its social identity as benevolent (Harber et al., 2010). Disadvantaged groups operate differently (Ellmers et al., 1992; Scheepers et al., 2002; 2006; Tajfel and Turner, 1979). Under contingent and non-contingent outcomes, members of a low status group allocated more reward to the in-group than the out-group, especially when the out-group's high status was illegitimate.

Intergroup Approach and Avoidance—A novel finding from the present research is the specification of when groups will approach or avoid members of another group. Contact is a necessary, yet insufficient condition for intergroup reconciliation. However, people will avoid members of an out-group even when they don't feel negative affect toward its members (Malloy, 2014), consequently the determinants of approach and avoidance are theoretically important. Approach was simultaneously determined by group status, out-group competence stereotypes, and the nature of the intergroup interaction. When groups' outcomes were non-contingent, social approach was equivalent for positively and negatively stereotyped out-groups, whereas the desire to collaborate on a task was greater under a positive than a negative competence stereotype. People were willing to engage in social activities with an out-group member regardless of their competence, because the motivation to be unbiased and egalitarian (Fiske, 2004; Harber et al., 2012) is incompatible with avoidance based on a capricious criterion (e.g. competence).

However, when task collaboration had implications for personal outcomes, intergroup approach differed for those with low and high status. Under outcome contingency, when the out-group was stereotyped as competent, members of a low status group reported willingness to collaborate on tasks. When the out-group was stereotyped as less competent, those with low status were less willingness to collaborate because of implications for the self. Contrary to our prediction (Hypothesis 3b), those with high status were willing to collaborate on a task with both competent and less competent out-group members when outcomes were contingent. Although, in Study 1 (non-contingent outcomes), those with high status were more willing to collaborate on a task with a competent than with a less competent out-group member. This inconsistency of results for those with high status warrants further research attention.

Perceiver Variance Components in Trait Judgments—Among those with low ingroup status, perceiver variance components were equivalent when rating the traits of positively and negatively stereotyped out-group targets, under both non-contingent and contingent outcomes. This replicated findings from face to face interactions of gay and heterosexual men (Miller & Malloy, 2003) and Black and White men (Malloy et al., 2011). Low social status engenders attention to, and differentiation of, higher status out-group members that often control resource attainment (Fiske, 2010).

Among those with high status, perceiver variance components were equivalent for a positively and negatively stereotyped out-group only when outcomes were non-contingent. This result replicates finding in face to face interactions of members of groups with an inherent status differential. Those with high status failed to differentiate the unique characteristics of those with low status (Miller & Malloy, 2003; Malloy et al., 2011). However, when the out-group was stereotyped as competent, and groups' outcomes were contingent, members of a high status group did indeed differentiate the traits of lower status out-group members. A failure to differentiate out-group members is functionally maladaptive under outcome contingency because biased personal stereotypes may put one's own reward in jeopardy. When out-group members' characteristics are relevant for one's own outcomes, they should be attended to vigilantly and their features should be differentiated as predicted by the Intergroup Relations Model (also see Fiske, 2010). Because the perceiver had only the information deployed by the experimental manipulations, the structure imposed on variances highlights the importance of status, stereotypes and contingencies in intergroup judgment.

Personal Outcomes and Intergroup Relations—Intergroup behavior, approach and trait ascription can be explained by a single principle; responses were determined by the implications for one's own outcomes. This principle has theoretical and practical implications for intergroup reconciliation (Nadler, Malloy & Fisher, 2008). Harris and Fiske (2008) proposed that groups in conflict may be unable to reconcile for fear that such a transition will adversely affect personal outcomes. Given the importance of these hedonic concerns, it is essential that post-conflict reconciliation efforts insure equality of opportunity for resource attainment (Malloy, 2008). While both advantaged and disadvantaged groups will warily assess the situation, implementation of structural change guaranteeing equality of

opportunity for resource attainment maintained by objective third parties holds promise for the reduction of intergroup conflict and reconciliation. Under these conditions, hedonic concerns can be harnessed to promote peaceful coexistence.

Implications for the self also affect approach to, and avoidance of, the out-group. Those with high and low status were willing to engage in social activities with out-group members regardless of their perceived competence. Avoidance of members of an out-group based on characteristic such as race, ethnicity, or work habits is unacceptable because people are motivated to be unbiased and egalitarian (Fiske, 2004; Gaertner & Dovidio, 1986; Harber et al., 2012). When the out-group was perceived as competent, members of a low status group were willing to engage in task collaboration; when stereotyped as less competent, avoidance followed. This finding may also be exploited to facilitate intergroup reconciliation. Mentoring opportunities for members of a disadvantaged group should be embraced by them because of the positive implications for the self. Mentors also receive the benefit of benevolently assisting another. However, this intergroup contact would require careful orchestration so that each perceives it as an equal status encounter (Pettigrew & Tropp, 2006) in spite of differences in specific skills.

The Self in Intergroup Relations—The self can be the basis for intergroup relations in the minimal group paradigm when features are arbitrary, abstract, and of little hedonic relevance (DiDonato, Ulrich, & Kruger, 2011). Implications for the self also determined responses in this laboratory simulation of natural intergroup relations. These finding specify when the joint effects of status, stereotypes, and outcome contingencies produce benevolent or self-protective intergroup responses. The magnitudes of the effect estimates for the independent variables in these studies ranged from moderate to exceptionally strong and document their theoretical importance. Attention to benevolence was particularly important because of the relative neglect of this phenomenon, and its significance for a comprehensive theory of intergroup relations.

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References

- Alesina A, Devleeschauwer A, Easterly W, Kurlat S, Wacziarg R. Fractionalization. Journal of Economic Growth. 2003; 8:155–194.
- Bettencourt B, Charlton K, Dorr N, Hume DL. Status differences and in-group bias: A meta-analytic examination of the effects of status stability, status legitimacy, and group permeability. Psychological Bulletin. 2001; 127(4):520–542. DOI: 10.1037/0033-2909.127.4.520 [PubMed: 11439710]
- Branscombe, NR., Ellemers, N., Spears, R., Doosje, B. The context and content of social identity threat. In: Ellemers, N.Spears, R., Doosje, B., editors. Social identity: Context, commitment, content. Oxford England: Blackwell Science; 1999. p. 35-58.
- Brewer MB. In-group bias in the minimal intergroup situation: A cognitive-motivational analysis. Psychological Bulletin. 1979; 86(2):307–324. DOI: 10.1037/0033-2909.86.2.307

Brewer MB. The psychology of prejudice: Ingroup love or outgroup hate? Journal of Social Issues. 1999; 55:429–444. DOI: 10.1111/0022-4537.00126

- Brewer, MB., Campbell, DT. Ethnocentrism and Intergroup Attitudes: East African Evidence. Halstead; New York: 1976.
- Campbell, DT. Ethnocentrism and other altruistic motives. In: Levine, David, editor. Nebraska Symposium on Motivation. Vol. 13. Lincoln: University of Nebraska Press; 1965. p. 283-311.
- Carver CS, Glass DC, Katz I. Favorable evaluations of Blacks and the handicapped: Positive prejudice, unconscious denial, or social desirability? Journal of Applied Social Psychology. 1978; 8(2):97–106. DOI: 10.1111/j.1559-1816.1978.tb00768.x
- Devine PG, Monteith MJ, Zuwerink J, Elliot AJ. Prejudice with and without compunction. Journal of Personality and Social Psychology. 1991; 60(6):817–830. DOI: 10.1037/0022-3514.60.6.817
- DiDonato TE, Ulrich J, Krueger JI. Social projection as induction and inference: An integrative model of intergroup differentiation, ingroup favoritism, and differential accuracy. Journal of Personality and Social Psychology. 2011; 100:66–83. DOI: 10.1037/a00210 [PubMed: 20939650]
- Durante F, Fiske ST, Kervyn N, Cuddy AC, Akande A, Adetoun BE, Storari CC. Nations' income inequality predicts ambivalence in stereotype content: How societies mind the gap. British Journal of Social Psychology. 2013; 52:726–746. DOI: 10.1111/bjso.1200551 [PubMed: 23039178]
- Dutton DG, Lake RA. Threat of own prejudice and reverse discrimination in interracial situations. Journal of Personality and Social Psychology. 1973; 28:94–100. DOI: 10.1037/h003558237/0022-3514.46.6.1335
- Ellemers N, Wilke H, Van Knippenberg A. Effects of the legitimacy of low group or individual status on individual and collective status-enhancement strategies. Journal of Personality and Social Psychology. 1993; 64:766–778. DOI: 10.1037/0022-3514.64.5.766
- Esses VM, Deaux K, Lalonde RN, Brown R. Psychological perspectives on immigration. Journal Of Social Issues. 2010; 66(4):635–647. DOI: 10.1111/j.1540-4560.2010.01667.x
- Fiske, ST. Social beings. John Wiley & Sons; 2004.
- Fiske, ST. Interpersonal stratification: Status, power, and subordination. In: Fiske, ST.Gilbert, DT.Lindzey, G.Fiske, ST.Gilbert, DT., Lindzey, G., editors. Handbook of social psychology. 5th. Vol. 2. Hoboken, NJ, US: John Wiley & Sons Inc; 2010. p. 941-982.
- Fiske ST, Cuddy AC, Glick P, Xu J. A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. Journal of Personality and Social Psychology. 2002; 82:878–902. DOI: 10.1037/0022-3514.82.6.878 [PubMed: 12051578]
- Gaertner L, Insko CA. Intergroup discrimination in the minimal group paradigm: Categorization, reciprocation, or fear? Journal of Personality and Social Psychology. 2000; 79:77–94. DOI: 10.1037/0022-3514.79.1.77 [PubMed: 10909879]
- Gaertner, SL., Dovidio, JF. The aversive form of racism. In: Dovidio, JF., Gaertner, SL., editors. Prejudice, discrimination, and racism. San Diego, CA US: Academic Press; 1986. p. 61-89.
- Harber KD. Feedback to minorities: Evidence of a positive bias. Journal of Personality and Social Psychology. 1998; 74:622–628. DOI: 10.1037/0022-3514.74.3.622 [PubMed: 9523409]
- Harber KD. The Positive Feedback Bias as a Response to Out-Group Unfriendliness. Journal Of Applied Social Psychology. 2004; 34:2272–2297. DOI: 10.1111/j.1559-1816.2004.tb01977.x
- Harber KD, Stafford R, Kennedy KA. The positive feedback bias as a response to self-image threat. British Journal of Social Psychology. 2010; 49:207–218. [PubMed: 19843351]
- Harber KD, Gorman JL, Gengaro FP, Butisingh S, Tsang W, Ouellette R. Students' Race and Teachers' Social Support Affect the Positive Feedback Bias in Public Schools. Journal of Educational Psychology. 2012; doi: 10.1037/a0028110
- Harris, LT., Fiske, ST. Diminishing vertical distance: Power and social status as barriers to intergroup reconciliation. In: Nadler, A.Malloy, TE., Fisher, JD., editors. The social psychology of intergroup reconciliation. New York, NY, US: Oxford University Press; 2008. p. 301-317.
- Jetten J, Spears R, Postmes T. Intergroup Distinctiveness and Differentiation: A Meta-Analytic Integration. Journal of Personality and Social Psychology. 2004; 86:862–879. DOI: 10.1037/0022-3514.86.6.862 [PubMed: 15149260]

John, OP. The "Big Five" factor taxonomy: Dimensions of personality in the natural language and in questionnaires. In: Pervin, LA., editor. Handbook of Personality: Theory and Research. New York, NY: Guilford Press; 1990. p. 66-100.

- Leach CW, Spears R, Branscombe NR, Doosje B. Malicious pleasure: Schadenfreude at the suffering of another group. Journal of Personality and Social Psychology. 2003; 84:932–943. DOI: 10.1037/0022-3514.84.5.932 [PubMed: 12757139]
- LeVine, RA., Campbell, DT. Ethnocentrism: Theories of conflict, ethnic attitudes, and group behavior. Oxford, England: John Wiley & Sons; 1972.
- Malloy, TE. Intergroup relations and reconciliation: A theoretical and methodological analysis. In: Nadler, A.Malloy, TE., Fisher, JD., editors. Social Psychology of Intergroup Reconciliation. New York: Oxford University Press; 2008.
- Malloy TE. Trait ratings of the in-group and out-group with minimal acquaintance: Differentiation and out-group favorability (*Différentiation et favorabilité des jugements sur les traits de l'endogroupe et de l'exogroupe lors des rencontres sans connaissance antérieure*). Psychologie Française. 2013; 58:337–350.
- Malloy, TE. Responses to Out-Groups Sharing a Common Feature with an Adversary: Intergroup Generalization and Differentiation. In: Draper, T., editor. Psychology of Prejudice: New Research. Nova Publishing; 2014.
- Malloy TE, Albright L. Interpersonal perception in a social context. Journal of Personality and Social Psychology. 1990; 58:419–428. DOI: 10.1037/0022-3514.58.3.419 [PubMed: 2324936]
- Malloy TE, Kenny DA. The Social Relations Model: An integrative method for personality research. Journal Of Personality. 1986; 54(1):199–225. DOI: 10.1111/j.1467-6494.1986.tb00393.x: 10.1037/0022-3514.58.3.419
- Malloy TE, Ristikari T, Berrios-Candelaria R, Lewis B, Agatstein F. Status-based asymmetry in intergroup responses: Implications for intergroup reconciliation. Cultural Diversity and Ethnic Minority Psychology. 2011; 17:31–42. DOI: 10.1037/a0021666 [PubMed: 21341895]
- Messick DM, Mackie DM. Intergroup relations. Annual Review of Psychology. 1989; :4045–81. DOI: 10.1146/annurev.ps.40.020189.000401
- Miller S, Malloy TE. Interpersonal behavior, perception, and affect in status-discrepant dyads: Social interaction of gay and heterosexual men. Psychology of Men and Masculinity. 2003; 4:121–135. DOI: 10.1037/1524-9220.4.2.121
- Mullen B, Brown R, Smith C. Ingroup bias as a function of salience, relevance, and status: An integration. European Journal of Social Psychology. 1992; 22:103–122. DOI: 10.1002/ejsp. 2420220202
- Nadler, A., Malloy, TE., Fisher, JD. Social psychology of intergroup reconciliation. New York: Oxford University Press; 2008.
- Pettigrew T, Tropp LR. A meta-analytic test of intergroup contact theory. Journal of Personality and Social Psychology. 2006; 5:751–783. DOI: 10.1037/0022-3514.90.5.751
- Rosenthal L, Levy SR. The relation between polyculturalism and intergroup attitudes among racially and ethnically diverse adults. Cultural Diversity and Ethnic Minority Psychology. 2012; 18:1–16. DOI: 10.1037/a0026490 [PubMed: 22250894]
- Scheepers D, Branscombe NR, Spears R, Doosje B. The emergence and effects of deviants in low and high status groups. Journal of Experimental Social Psychology. 2002; 38:611–617. DOI: 10.1016/S0022-1031(02)00506-1
- Scheepers D, Spears R, Doosje B, Manstead AR. Integrating identity and instrumental approaches to intergroup differentiation: Different contexts, different motives. Personality and Social Psychology Bulletin. 2002; 28:1455–1467. DOI: 10.1177/014616702237574
- Scheepers D, Spears R, Doosje B, Manstead AR. Two functions of verbal intergroup discrimination: Identity and instrumental motives as a result of group identification and threat. Personality and Social Psychology Bulletin. 2003; 29:568–577. DOI: 10.1177/0146167203029005002 [PubMed: 15272991]
- Scheepers D, Ellemers N. When the pressure is up: The assessment of social identity threat in low and high status groups. Journal of Experimental Social Psychology. 2005; 41:192–200. DOI: 10.1016/j.jesp.2004.06.002

Scheepers D, Spears R, Doosje B, Manstead AR. The social functions of ingroup bias: Creating, confirming, or changing social reality. European Review of Social Psychology. 2006; :17359–396. DOI: 10.1080/10463280601088773

- Shepherd L, Spears R, Manstead ASR. The self-regulatory role of anticipated group-based shame and guilt in inhibiting in-group favoritism. European Journal Of Social Psychology. 2013a; 43:493–504. DOI: 10.1037/t05289-000
- Shepherd L, Spears R, Manstead ASR. When does anticipating group-based shame lead to lower ingroup favoritism? The role of status and status stability. Journal of Experimental Social Psychology. 2013b; 49:334–343. DOI: 10.1016/j.jesp.2012.10.012
- Sherif, M. The psychology of social norms. Oxford England: Harper Torchbooks; 1966.
- Sherif, CW., Sherif, M., Nebergall, RE. Attitude and attitude change The social judgment-involvement approach. Philadelphia: W. B. Saunders; 1965.
- Sidanius, J., Pratto, F. Social dominance. Cambridge, UK: Cambridge University Press; 2001.
- Sumner, WG. Folkways. Ginn; New York: 1906.
- Tajfel H. Social psychology of intergroup relations. Annual Review of Psychology. 1982:331–39.
- Tajfel, H., Turner, JC. An integrative theory of intergroup conflict. In: Austin, WG., Worchel, S., editors. Social identity and intergroup relations. Cambridge, England: Cambridge University Press; 1979. p. 15-40.

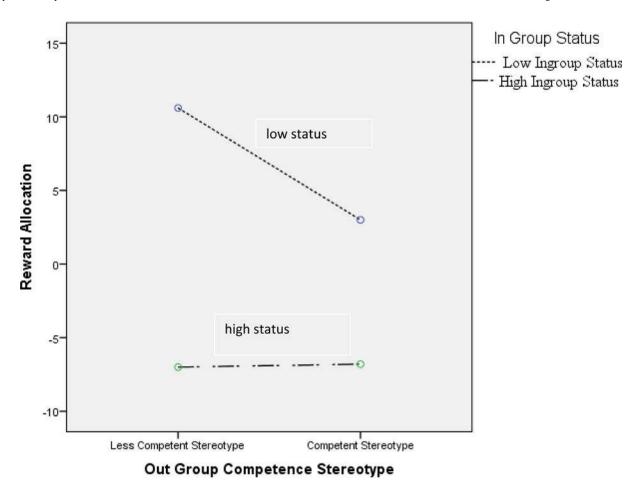


Figure 1. Reward allocation as a function of out-group stereotype and in-group status under non-contingent outcomes (Study 1). Reward allocation: +18 maximum in-group favoritism, -18 maximum out-group favoritism, 0 no favoritism.

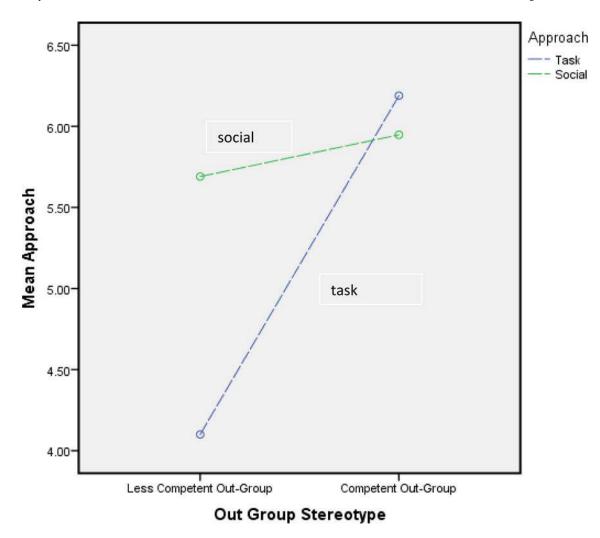


Figure 2.

Mean approach to the out-group on task and social constructs (non-contingent group outcomes – Study 1).

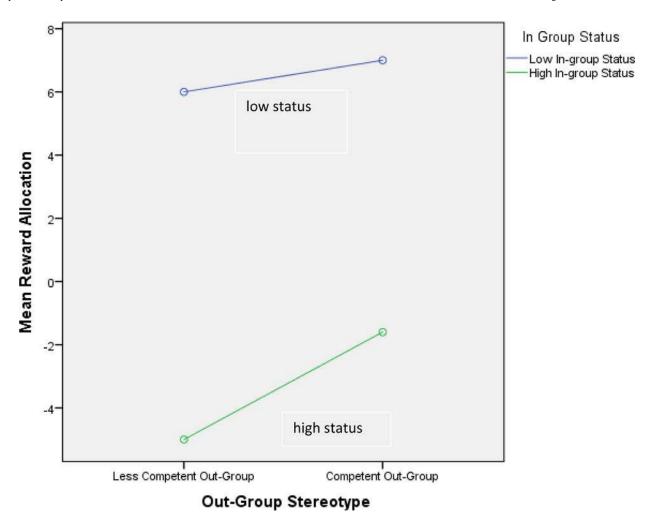


Figure 3. Reward allocation as a function of out-group stereotype and in-group status under contingent outcomes (Study 2). Reward allocation: +18 maximum in-group favoritism, -18 maximum out-group favoritism, 0 no favoritism.

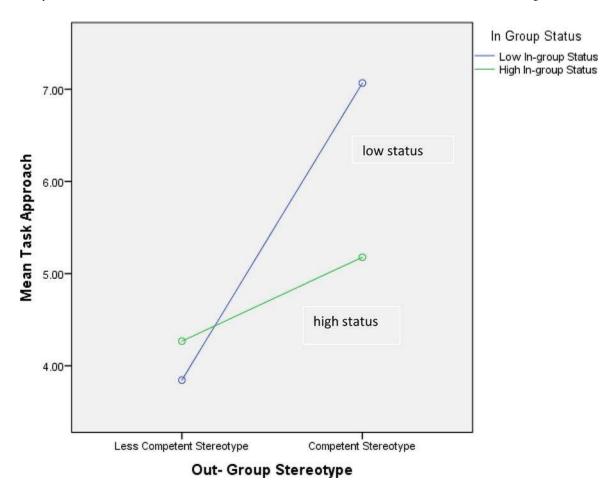


Figure 4. Mean task approach as a function of out-group stereotypes and in-group status under contingent group outcomes (Study 2).

Table 1

Summary of the Hypotheses

Non-Contingent Group Outcomes							
In-Group Status	Out-Group Competence Stereotype Prediction		Hypothesis				
High	Competent & Less Competent	Benevolence	1				
Low	(High OGS) Less Competent	Strongest Self-Protection	1b				
Contingent Group Outcomes							
In-Group Status	Out-Group Competence Stereotype	Prediction	Hypothesis				
Low & High	Competent	Self Protection	2				
High	Competent	OG Task Approach	3b				
High	Competent	OG Traits Differentiated	4a				
Non-Contingent and Contingent Group Outcomes							
In-Group Status	Out-Group Competence Stereotype	Prediction	Hypothesis				
Low	Competent & Less Competent	Self-Protection	1a				
Low & High	Competent & Less Competent	OG Social Approach	3				
Low	Competent	OG Task Approach	3a				
Low	Competent & Less Competent	OG Traits Differentiated	4				

Note. Presented is in-group status of the participant, the out-group competence stereotype and theoretical predictions under non-contingent or contingent outcomes or both.

OGS is out-group status OG is out-group

Table 2

A Pattern of Ratings that Maximizes Perceiver Variance in Hypothetical Data

		Out-Group Members		
		1	2	3
	A	9	9	9
In-Group Members	В	4	4	4
	C	1	1	1

Note. Hypothetical trait ratings of three out-group members by three in-group members on a 9 point scale (1 low - 9 high).

Table 3

Indicators of Intergroup Approach on Task and Social Activity Constructs

Task

- 1. What is the likelihood that you would rely on the advice of a highly accurate/inaccurate dot estimator on an important life decision?
- 2. How much would you enjoy having a highly accurate/inaccurate dot estimator as a study partner for an important test?
- 3. To what extent would you be willing to work with a highly accurate/inaccurate dot estimator on an important group project?

Social Activity

- 1. To what extent would you like to attend a social event with a highly accurate/inaccurate dot estimator?
- 2. What is the likelihood that a highly accurate dot estimator could be your best friend?
- 3. How much would you like to go on vacation with a highly accurate/inaccurate dot estimator?
- 4. How much would you enjoy dating a highly accurate/inaccurate dot estimator?
- 5. How much would you enjoy having dinner with a highly accurate/inaccurate dot estimator?

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Table 4

Perceiver Variances by In-Group Status and Out-Group Stereotypes, Non-Contingent and Contingent Outcomes

	Groups' Outcome Contingency				
	Non-Contingent Out-Group Competence Stereotype		Contingent		
			Out-Group Competence Stereotype		
	Competent	Less Competent	Competent	Less Competent	
Low In-Group Status	28.21 = (5.49)	36.28 (5.71)	29.17 = (5.94)	28.30 (5.52)	
High In-Group Status	22.74 = (5.69)	21.79 (5.54)	$15.57 \neq (5.88)$	43.54 (5.82)	

Note. Entries are unstandardized perceiver variance components in a 9 point metric. Condition means are in parentheses and in a 9 point metric. Larger perceiver variances indicate *less differentiation* of targets' traits.