Published in final edited form as:

Group Process Intergroup Relat. 2010 July ; 13(4): . doi:10.1177/1368430209355650.

Social status and the pursuit of positive social identity: Systematic domains of intergroup differentiation and discrimination for high- and low- status groups

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Abstract

Research on intergroup discrimination has focused on the cognitive and motivational mechanisms involved, but the role of stereotype content has been neglected. Drawing on social identity theory and stereotype content research, the current studies investigated the role of stereotype content in intergroup differentiation and discrimination. Across two studies, students from high- and low-status groups differentiated themselves positively on stereotypes of competence and warmth respectively, and in allocations of resources in domains relevant to competence (academics, research) and warmth (sports, community outreach). Furthermore, there was evidence that discrimination by high- and low-status groups was driven by their respective stereotypes of competence and warmth. It is argued that stereotypes of competence and warmth, derived from status and power relations between groups, define the domains in which groups pursue positively distinct identities.

Keywords

discrimination; positive distinctiveness; social identity; status; stereotype content

Since its earliest formulation, research on social identity theory (SIT) (Tajfel & Turner, 1979, 1986) has focused on the cognitive and motivational mechanisms underlying intergroup discrimination, but the role of stereotype content has been less central. SIT argues that discrimination is motivated by a need for positive and distinctive social identity, but that it is constrained by objective status relations between groups. Consistent with this, it has been established that high-status groups show ingroup favouritism particularly in status-relevant domains, while low-status groups show ingroup favouritism in status-irrelevant domains (Bettencourt, Dorr, Charlton, & Hume, 2001; Brewer, 1979; Mullen, Brown, & Smith, 1992; Reichl, 1997; Sachdev & Bourhis, 1985, 1987, 1991). However, existing research does not define these domains in terms of content, assuming it depends entirely on the specific nature of the status relation. Drawing on stereotype content research (Cuddy, Fiske, & Glick, 2008; Fiske, Cuddy, Glick, & Xu, 2002; Fiske, Xu, Cuddy, & Glick, 1999), we propose that the domains in which high- and low-status groups pursue positive distinctiveness can be broadly defined: high-status groups in domains related to competence, and low-status groups in domains related to warmth. In this paper we develop these links

between SIT and the stereotype content model and present two studies testing derived hypotheses.

Social identity theory and intergroup discrimination

Since the minimal group studies (Tajfel, Billig, Bundy, & Flament, 1971), research in SIT has focused on the cognitive and motivational processes underlying intergroup discrimination. SIT argues that discrimination is driven by a fundamental motivation to maintain a positive and distinctive social identity (Tajfel & Turner, 1979, 1986). This motive often leads to discrimination because favoring ingroup members in various ways enhances the apparent value and distinctiveness of the ingroup, leading to positive social identity. Since successful discrimination enhances the positive distinctiveness of the ingroup, the importance of the ingroup to one's self-concept (i.e., strength of identification) has been hypothesized to predict discrimination (Abrams & Hogg, 1988). However, identification does not consistently predict discrimination empirically (Hinkle & Brown, 1990; Kelly, 1993) and groups often show outgroup favouritism, particularly towards higher status groups on status-related dimensions (Bettencourt et al., 2001; Mullen et al., 1992; Reichl, 1997; Sachdev & Bourhis, 1985, 1987, 1991). Social identity theorists have been careful to stress that identification per se is not sufficient to predict discrimination, and that the broader social context, including status relations between groups, needs to be taken into account (e.g., Turner, 1999).

Building on the original minimal group studies, Sachdev and Bourhis (1985, 1987, 1991) conducted a series of studies investigating how status and power relations affect the allocation of points to members of experimental ingroups and out-groups. They found that members of groups high in status or power showed ingroup favouritism while members of groups low in status or power showed outgroup favouritism. In a separate study, Reichl (1997) showed that members of low-status experimental groups showed outgroup favouritism in status-related domains, but ingroup favouritism in status-unrelated domains. Thus, high-status groups are often particularly discriminatory, and low-status groups often show out-group favouritism, in status-related domains. Low-status groups tend to show ingroup favouritism only in domains unrelated to status. This general pattern has been confirmed in a number of reviews and meta-analyses (Bettencourt et al., 2001; Brewer, 1979; Mullen et al., 1992).

Clearly, high- and low-status groups show ingroup favouritism in separate domains (see also Lemaire, 1974). However, existing research has not attempted to define these domains in terms of content, assuming it depends on the specific nature of the status relation. Widely cited studies have tended to use experimental laboratory groups and create status relations in terms of some specific dimension, such as performance at a task, and then measure discrimination in domains directly related or unrelated to that dimension. For example, Sachdev and Bourhis (1987, 1991) used a bogus creativity test to manipulate group status and assessed discrimination in terms of evaluations of the creativity of group products. Similarly, Reichl (1997) used a bogus "Creative Intelligence Test" to manipulate status between groups, and then assessed discrimination through point allocations that were either based on test scores (relevant) or part of a separate study (irrelevant).

While informative, operationalizing status in such a specific way does not tell us which domains are relevant to social groups that share more diffuse and enduring status relations. Between real groups in society, status differences often cannot be reduced to differences on specific evaluative dimensions (see Berger, Cohen, & Zelditch, 1972). Rather, status differences often carry evaluative differences on a wide range of dimensions that are not clearly prescribed or truncated. For example, the generally higher status of males over

females in many societies not only manifests in evaluative differences in specific domains (e.g., maths ability), but in a wide and loosely defined range of domains (e.g., management, law, medicine, engineering, etc.). In addition, there is often an equally wide and loosely defined range of domains in which lower-status groups are positively evaluated (e.g., women in nursing, primary-school teaching, home-keeping, etc.) (Eagly, 1987).

The domains in which high- and low-status groups are positively and negatively evaluated are diverse, but they map onto two broad dimensions that have been variously described as agency, autonomy, or competence on the one hand, and communion, expressiveness, or warmth on the other. Different theorists have employed different terms, but they boil down to two fundamental dimensions in terms of which self and other tend to be perceived and evaluated—competence and warmth (see Cuddy et al., 2008; Fiske, Cuddy, & Glick, 2007 for reviews). These dimensions have long been linked to gender stereotypes (e.g., Eagly & Steffen, 1984) and sex differences (Buss, 1981), but more recent research shows they underpin stereotypes of a much wider range of groups, and that they derive from structural relations (status and interdependence) between them (Cuddy et al., 2008, 2009). This suggests there are general evaluative dimensions in terms of which high- and low-status groups are perceived and evaluated, and that as stereotypes, they may play an important role in constraining and directing groups' pursuit of positive distinctiveness.

Stereotypical traits of high- and low-status groups: The stereotype content model

The stereotype content model (Cuddy et al., 2008; Fiske et al., 1999, 2002) argues that these two fundamental dimensions—competence and warmth—underpin stereotypes of most groups, and that they derive from status and power relations between them. Considerable evidence shows that high-status groups are consistently stereotyped as more competent than low-status groups, who in turn are often stereotyped as warmer than high-status groups (see Cuddy et al., 2008, for a review). For example, Fiske et al. (2002) examined stereotypes of 23 social groups in the United States and found that of these, 20 were consistently seen as either significantly more competent than warm, which tended to be the higher status groups, or significantly more warm than competent, which tended to be the lower status groups. In experimental research, ratings on one dimension are often negatively correlated with ratings on the other (Judd, James-Hawkins, Yzerbyt, & Kashima, 2005; Kervyn, Yzerbyt, Demoulin, & Judd, 2008).

The relationship between perceived status and perceived competence is remarkably strong and robust (Cuddy et al., 2009), but the basis of warmth judgements is less clear. Fiske and colleagues argue that warmth is more related to competition between groups than status *per se* (Fiske et al., 1999, 2002), and so may derive from the degree of threat or imposition an outgroup is perceived to represent to the ingroup. Others argue that warmth is meant to compensate low-status groups for their perceived lack of competence and thus maintain the status quo (Jost & Banaji, 1994; Kay & Jost, 2003; Kay, Jost, & Young, 2005). Warmth is also an important aspect of group identity for both high- and low-status groups (Leach, Ellemers, & Barreto, 2007) and is relatively less confirmable than competence (Tausch, Kenworthy, & Hewstone, 2007). The implications of this are that, while competence is stereotypical of high-status groups and warmth is stereotypical of low-status groups, competence judgements are closely tied to objective indicators whereas warmth judgements are more subjective.

Stereotype content and positive distinctiveness

The links between relative group status and stereotype contents suggest high-status groups are likely to see themselves and be seen as more competent than warm, while low-status groups are likely to see themselves and be seen as more warm than competent. Since both dimensions are arguably positive, it is also likely that high- and low-status groups pursue positive social identity primarily along the dimensions of competence and warmth respectively. This may be achieved in a number of ways. Firstly, high- and low-status groups may differ in the relative value they attach to competence and warmth, and/or the importance or centrality of these two dimensions to their group identity (Leach et al., 2007). Secondly, they may self-stereotype in ways that positively differentiate themselves from comparison out-groups on their preferred dimension, emphasizing differences on the dimension on which they are stereotypically superior while minimizing differences in the domain in which they stereotypically fall short. Another way group members may pursue positive distinctiveness is through differential discrimination in domains related to competence and warmth. Just as status has been shown to constrain and direct discrimination in status-related domains (Reichl, 1997), stereotypes of competence and warmth may constrain and direct discrimination in domains related to or requiring these traits. That is, high-status groups may show more discrimination in domains related to competence, while low-status groups may show more discrimination in domains related to warmth.

Of course, it is also evident that groups pursue positive distinctiveness in the other or both domains. Low-status groups, in particular, may seek to be positively evaluated in domains of competence, since competence is prescriptive of social status. One need look no further than the American civil rights movement, the race and intelligence debate, or the feminist movement for instances in which low-status groups seek to be positively evaluated in the competence domain. However, we suggest this situation is characteristic of unstable and/or illegitimate status relations, as it represents a form of social competition. While the legitimacy and stability of status relations are likely to have important implications for the relationships between status, stereotypes, and discrimination, for the purposes of the current studies we restrict our analysis to status relations that are relatively stable and legitimate. In such systems, we argue, high-status groups are likely to seek positive distinctiveness primarily in relation to competence, while low-status groups are likely to seek positive distinctiveness primarily in relation to warmth.

The current research

To examine these ideas we conducted two studies with members of high- and low-status groups to assess the effects of relative status, group identification, and stereotypes on intergroup differentiation and discrimination. In this research, we assessed participants' ratings of the competence and warmth of the ingroup and outgroup, and related these to discrimination operationalized as resource allocations. In terms of our hypotheses, we expected high-status groups to emphasize their superiority on competence and minimize differences on warmth, and low-status groups to do the reverse (Hypothesis 1). Secondly, we expected high-status groups to show ingroup favouritism particularly in domains related to competence, and low-status groups to show ingroup favouritism in domains related to warmth (Hypothesis 2). Thirdly, we expected discrimination by high-status groups to be more related to competence than warmth stereotypes, and discrimination by low-status groups to be more related to warmth than competence stereotypes (Hypothesis 3).

Study 1

Study 1 was carried out with students from two similar sixth-form colleges located within the same town in the UK, which were clearly differentiated in status. This difference was reflected in objective measures of each college's average student performance,¹ and in stricter entry criteria for the higher status college in most subjects. In other respects, the two colleges were highly comparable. Both colleges were roughly the same size (approximately 1,700 students each) and students were generally between 16 and 19 years of age. Furthermore, most students had made an active choice to attend one of the two colleges after completing their GCSEs (General Certificate of Secondary Education) at local high schools, so were very aware of the presence and reputations of the two colleges. These groups will be referred to hereafter as the high-status (HS) and low-status (LS) groups.

In order to examine the role of stereotypes in discrimination, we asked participants to allocate resources to anonymous ingroup and outgroup members using point allocation, or Tajfel matrices (Tajfel et al., 1971). Furthermore, we examined discrimination in two separate domains that differed in their relevance to the stereotypes—academia and sports. We reasoned that if the HS group is stereotypically more competent (intelligent) than the LS group, they should be particularly discriminatory in the academic domain. In contrast, if low-status groups seek positive distinctiveness primarily in the warmth domain, they should be less discriminatory in the academic domain and more discriminatory in the sports domain. We reasoned that the sports domain incorporates sportsmanship and cooperation, and was sufficiently distinct from academic ability to serve as a separate domain in which to pursue positive distinctiveness.

Method

Participants—Sixty-nine students (77% female) from the HS group and 100 (68% female) from the LS group participated in the study. All were between 16 and 18 years old (median = 17) and participated as part of a class exercise in groups of three to 20. Data from the HS group were collected over three consecutive days, while data for the LS group was collected in a single day, approximately three months later (due to access issues).

Materials and procedure—Sessions were carried out in standard classrooms at each college. A male experimenter conducted each session, explaining that the study was investigating opinions and beliefs about students at the participants' college and the other college. The study consisted of a series of questionnaires and point-allocation matrices. Each questionnaire was completed sequentially, with the next handed out when all participants had finished the previous questionnaire.

The first questionnaire contained a 5-item scale to measure participants' identification with their college (α s > .79), adapted from Doosje, Ellemers, and Spears (1995). The second questionnaire measured stereotypes of competence and warmth by asking participants to rate students from each college on a set of traits using 7-point scales (1 = *not at all*; 7 = *extremely*). Four traits related to competence: smart, capable, intelligent, and efficient; and four related to warmth: sincere, friendly, trustworthy, and likeable. Principal components factor analyses with oblique rotation were performed on all eight items for each group within each sample. In all cases two factors emerged with eigenvalues greater than 1, explaining between 53.3 and 63.4 percent of the variance. The four warmth and four competence items generally loaded onto separate factors, though "sincere" and "capable" often had weaker loadings than other items. Reliabilities of the four warmth and four

¹League tables are published each year in a leading newspaper in which each college is ranked in terms of its academic performance.

competence items for each group and each sample ranged from .61 to .82, with six of the eight scales exceeding .7. All four items were retained in each scale.

Following the second questionnaire, the experimenter introduced the point allocation, or Tajfel matrices (see Tajfel et al., 1971). These matrices each involve 13 pairs of points that represent resources to be allocated to anonymous ingroup and outgroup members (see Bourhis, Sachdev, & Gagnon, 1994). For each matrix, participants choose one pair of points to allocate, with one number representing points allocated to an ingroup member and the other to an outgroup member. In completing the matrices, participants can adopt a range of strategies, which can later be deciphered through analyses of their choices. For example, they may adopt a strategy of allocating equal points to both recipients (i.e., parity), disregarding options with higher but unequal payoffs; they may choose the option with the highest total payoff, regardless of whether one recipient gets more than the other (i.e., maximum joint profit); or they may choose the option that allocates the highest amount to the ingroup member regardless of the amount allocated to the outgroup member (i.e., maximum ingroup profit). In minimal group studies it has been found that participants often choose a strategy that allocates more points to the ingroup recipient than the outgroup recipient even at the expense of a higher but equal payoff. For example, participants may choose to allocate 11 points to the ingroup member and nine to the outgroup member rather than give 13 points to each. This strategy suggests the allocator's primary goal is to differentiate the groups as much as possible (i.e., maximum differentiation), even at the expense of ingroup profit. Using simple algorithms it is possible to quantify the influence or "pull" of these different strategies and thus to infer the allocator's motives. These matrices operate successfully in a wide range of intergroup research, involving minimal and real groups (Bourhis & Sachdev, 1986), providing a valid and sensitive measure of discrimination in intergroup research (for further information on the use of these strategies, see Bourhis et al., 1994).

Using these matrices, participants were asked to allocate points to an anonymous student (identified by a code number) from their college and another from the other college for two separate abilities—sports and academia. There were 12 matrices in total, six for each ability. The matrices appeared in a booklet with one matrix per page. The order of the matrices in each booklet was randomized. The explanation of the matrices was accompanied by an overhead projection of one page of a matrix booklet. The experimenter explained that the numbers in the matrices should be considered as points, like course credits, and that they could allocate the points any way they chose, provided they chose points from only one box in each matrix. After answering any questions, the experimenter distributed the booklets for completion.

The final questionnaire measured participants' beliefs about the relative status of the two colleges and how competitive they were towards each other. Three items measured status: "Students at [HS group] are more likely than students from [LS group] to come from upper class families," "[HS group] students are generally higher in socioeconomic status than [LS group] students," and "[HS group] students are more likely to come from wealthy families than students from [LS group]." Responses were made on 7-point Likert-type scales (1 = *disagree completely*, 7 = *agree completely*). Competition was measured with three items: "To what extent do you think [HS group] and [LS group] students compete with each other in academics?," "To what extent do you think [HS group] and [LS group] students compete with each other in sports?" and "How likely do you think it is that you will have to compete with [LS group] students in the future, for things like university places or jobs?" (1 = *not at all*, 7 = *very*). Afterwards, the experimenter explained the rationale for the study and the procedures used, instigated a discussion about the relations between the two colleges, and answered any questions participants had.

Results

Identification, status and competition between the groups—To ensure our empirical context matched our theoretical context, we examined group identification and perceived status and competition between the groups. Both samples identified highly with their ingroup, but the LS sample identified more strongly ($M = 5.20$, $SD = .97$) than the HS sample ($M = 4.85$, $SD = 1.24$), $t(167) = 2.05$, $p = .042$. Both samples perceived the HS group to be higher in status than the LS group ($M_{\text{high}} = 5.05$, $SD = 1.22$; $M_{\text{low}} = 4.89$, $SD = 1.54$), $t < 1$, ns , and perceived substantial competition between them in terms of sports ($M = 5.61$, $SD = 1.07$; $M_{\text{low}} = 5.27$, $SD = 1.29$), academics ($M_{\text{high}} = 4.65$, $SD = 1.43$; $M_{\text{low}} = 5.57$, $SD = 1.17$), and anticipated competition for jobs and university places in the future ($M = 4.91$, $SD = 1.29$; $M_{\text{low}} = 5.66$, $SD = 1.53$). All single items, and the combined scales, were significantly above the midpoint of the scale, $t_s > 3.78$, $p_s < .001$.

H1: Differentiation through stereotypes—Hypothesis 1 predicted that the HS group would emphasize their superiority on competence and minimize differences on warmth, while the LS group would do the reverse. It is important to note, first, that the patterns of stereotype ratings revealed the expected target group by trait interaction, $F(1, 167) = 274.45$, $p < .001$, $\eta^2 = .62$, with the HS group rated higher in competence ($M = 5.96$, $SD = .61$) than warmth ($M = 4.74$, $SD = .93$), and the LS group rated higher in warmth ($M = 5.18$, $SD = .83$) than competence ($M = 4.89$, $SD = .71$). All pairwise comparisons were significant, $F_s > 17$, $p_s < .001$. More importantly for H1, this interaction was qualified by a three-way interaction involving participant group, $F(1, 167) = 13.19$, $p < .001$, $\eta^2 = .07$, suggesting stereotype ratings differed between the samples (see Figure 1).

As can be seen in Figure 1, the HS sample emphasized their competence advantage and minimized differences in warmth, whereas the LS sample did the reverse. As expected, the HS sample rated the groups more different on competence ($M_{\text{difference}} = 1.36$, $SD = .75$) than the LS sample ($M_{\text{difference}} = .86$, $SD = .76$), and the LS sample rated the groups more different on warmth ($M_{\text{difference}} = .90$, $SD = 1.09$) than the HS sample ($M_{\text{difference}} = .23$, $SD = .93$). These differences in relative competence and warmth were both significant ($t_{\text{competence}} [167] = 4.82$, $p < .001$; $t_{\text{warmth}} [167] = 7.05$, $p < .001$). Furthermore, the degree of positive differentiation on competence and warmth was correlated with identification among both the HS sample ($r_{\text{competence}} = .22$, $p = .071$; $.23$, $p = .023$; $r_{\text{warmth}} = .27$, $p < .006$). This means that high identifiers in the HS group emphasized their competence advantage and conceded less warmth to the outgroup, while high identifiers in the LS group emphasized their warmth advantage and conceded less competence to the outgroup.

H2: Intergroup discrimination across domains—To examine whether the HS and LS samples showed ingroup favouritism in academic and sports domains respectively, we analysed pull scores following the recommendations of Bourhis et al. (1994).² Of the six possible pull scores (representing six allocation strategies) the three indicating ingroup favouritism are most important for our analysis: (a) preference for maximum differentiation over maximum ingroup profit and joint profit (MD on MIP + MJP); (b) preference for ingroup favouritism over maximum joint profit (FAV on MJP); and (c) preference for ingroup favouritism over parity (FAV on P). These pull scores indicate the extent to which the associated strategy influenced participants' allocations. According to Hypothesis 2, the three ingroup-favouring strategies should exert stronger pulls on HS participants' allocations

²In each matrix, two strategies are pitted against each other as poles of the distribution matrix. Across the six matrices, favouritism (FAV) is pitted against maximum joint profit (MJP), maximum differentiation (MD) against maximum ingroup profit plus maximum joint profit (MIP + MJP), and parity (P) against FAV. Pull scores are calculated to represent the relative pull of each strategy on the other, yielding six pull scores in total. The analysis assesses whether each strategy exerted a significant pull on its alternative strategy. For example, whether FAV exerted a pull on MJP, and whether MJP exerted a pull on FAV.

in the academic than the sports domain, and on the LS participants' allocations, more in the sports than academic domain. In other words, Hypothesis 2 predicts a group by domain interaction.

To test this, we conducted a two (group: HS vs. LS) by two (domain: academia vs. sports) by three (allocation strategy) ANOVA with repeated measures on the second and third factors. This revealed the hypothesized group by domain interaction, $F(1, 152) = 72.46, p < .001, \eta^2 = .32$, with the HS sample using the ingroup favouring strategies more in the academic domain than the sports domain, and the LS group using the ingroup favouring strategies more in the sports domain than the academic domain (see Figure 2). There was also a significant though less strong three-way interaction between group, domain, and strategy, $F(2, 304) = 14.08, p < .001, \eta^2 = .09$, indicating the three ingroup-favouring strategies were not used equally by both groups. As shown in Figure 2, however, the overall pattern is very clear: the HS sample used the three ingroup-favouring strategies more in the academic domain, while the LS sample used them more in the sports domain.

While pull scores provide insight into the strategies used to make allocations, they don't translate directly into absolute differences in point allocations. To illustrate discrimination in an absolute sense, we analysed the total number of points allocated to each group in each domain. The difference in the total number of points allocated to the ingroup and outgroup for sporting and academic ability by each sample are shown in Figure 3. As illustrated, and further confirming Hypothesis 2, the two samples showed stronger ingroup favouritism in separate domains: the HS sample discriminated most in the academic domain, $F(1, 167) = 45.27, p < .001, \eta^2 = .21$, while the LS sample discriminated most in the sports domain, $F(1, 167) = 85.19, p < .001, \eta^2 = .34$. This was reflected in a significant target group by domain interaction, $F(1, 167) = 74.05, p < .001, \eta^2 = .31$.

Overall there was clear support for Hypothesis 2. The HS sample showed strong ingroup favouritism in the academic domain but not in the sports domain. In contrast, the LS samples showed strong ingroup favouritism in the sports domain but not in the academic domain.

H3: Relationships between stereotypes and discrimination—Hypothesis 3

predicted that discrimination by high-status groups would be more related to competence than warmth, and discrimination by low-status groups would be more related to warmth than competence. This was examined with a series of hierarchical regression analyses. First, we computed difference scores for allocations in each domain so that higher scores indicated stronger ingroup favouritism within each sample. Since this outcome measure represents relative resource allocations we felt it appropriate to use relative competence and warmth as predictors. Accordingly, we used the difference scores computed to test H1 as predictors rather than mean ratings of each group on each stereotype. Identification, status, and competition were entered in Step 1, and stereotype difference scores in Step 2, with ingroup favouritism in sports and academia as outcome variables in separate regressions. For each domain, we first removed outliers that were more than 1.96 standard residuals away from the regression line. This resulted in the removal of five participants from the HS sample and four from the LS sample for academia, and four from the HS sample and five from the LS sample for sports. Results of the regression analyses are summarized in Table 1.

Amongst the HS sample, the full model accounted for 39.8% of the variance in ingroup favouritism in the academic domain, $F(5, 58) = 7.68, p < .001$. Identification and competition were both significant in Step 1, explaining 28.6% of the variance. Adding the stereotypes in Step 2 explained a further 11.2% of the variance, $F_{\text{change}}(2, 58) = 5.42, p = .007$. In the final model, competence ($\beta = .303, t = 2.73, p = .008$) but not warmth ($\beta = -.105, t < 1, ns$) was a significant predictor and identification was no longer significant ($\beta = .221, t$

= 1.92, $p = .060$). In the sports domain, the full model accounted for 17.2% of the variance in ingroup favouritism, $F(5, 59) = 2.45$, $p = .044$. Only identification was a significant predictor at Step 1 ($\beta = .324$, $t = 2.70$, $p = .009$) and adding the stereotypes in Step 2 did not significantly improve the model, $R^2_{\text{change}} = .05$, $F(2, 59) = 1.61$, $p = .209$.

Amongst the LS sample, the full model accounted for 15.2% of the variance in ingroup favouritism in the academic domain, $F(5, 90) = 3.23$, $p = .010$. Competition was marginally significant in Step 1 ($\beta = -.194$, $t = -1.88$, $p = .063$). Adding the stereotypes explained a further 10.3% of the variance, $F_{\text{change}}(2, 90) = 5.46$, $p = .006$. In the final model, warmth ($\beta = -.333$, $t = -3.26$, $p = .002$) but not competence ($\beta = -.050$, $t < 1$, ns) was a significant predictor. In the sports domain, the full model accounted for 19.3% of the variance in ingroup favouritism, $F(5, 89) = 4.25$, $p = .002$. None of the predictors in Step 1 were significant, and adding the stereotypes in Step 2 explained a further 13.7% of variance, $F_{\text{change}}(2, 89) = 7.56$, $p = .001$. In the final model, warmth ($\beta = -.389$, $t = -3.88$, $p < .001$) but not competence ($\beta = .035$, $t < 1$, ns) was a significant predictor.

Thus, consistent with Hypothesis 3, ingroup favouritism by the HS sample in the academic domain was significantly related to competence but not warmth stereotypes, whereas ingroup favouritism by the LS sample in both domains was significantly related to warmth but not competence stereotypes. Identification was a significant predictor in Step 1 amongst the HS sample, but was only marginally significant in Step 2. Identification was not significant amongst the LS sample in either domain. Competition had an independent effect on ingroup favouritism for both groups—the more competitive the groups were seen to be, the less ingroup domain was significantly related to competence favouritism the groups showed.

Since identification was a significant predictor of ingroup favouritism amongst the HS sample, but was reduced to nonsignificance when the stereotypes were added, it is possible that any effects of identification on ingroup favouritism operated indirectly through stereotypes. To test this, we used a bootstrapping method (Preacher & Hayes, 2008) to estimate the significance of the indirect pathways from identification to ingroup favouritism via stereotypes for both groups.³ In these tests, we considered the indirect effects significant if the bias corrected and accelerated confidence intervals did not contain zero. Amongst the HS sample, the indirect pathway through competence was not significant in either domain (CI_{95-academia}: $-.25, 2.54$; CI_{95-sports}: $-.18, 1.77$). Although competence predicted ingroup favouritism in the academic domain ($\beta = .303$, $t = 2.73$, $p = .008$), identification did not significantly predict competence ($\beta = .133$, $t = 1.76$, $p = .083$). The pathway through warmth was not significant in either domain (CI_{95-academia}: $-.01, 3.81$; CI_{95-sports}: $-.38, 2.24$). Amongst the LS sample, the indirect pathway through warmth was significant in both the academic (CI₉₅: $-5.86, -.70$) and sports (CI: $-4.50, -.67$) domains, but the pathway through competence was not significant in either domain (CI_{95-academia}: $-.59, 2.59$; CI_{95-sports}: $-1.49, .86$). These results provide mixed support for a mediational model.

Discussion

We argued that high- and low-status groups pursue positive distinctiveness primarily in separate domains of competence and warmth, respectively. Study 1 provides good support for this on a number of levels, broadly confirming all three hypotheses. Firstly, the HS sample differentiated the groups more strongly on competence than did the LS sample, while the LS sample differentiated the groups more on warmth, and the degree of

³Indirect effects are traditionally tested only in the context of a significant direct effect of a predictor (e.g., identification) on an outcome variable (e.g., ingroup favouritism). However, Hayes (2009) argues that this criteria is too conservative and that indirect effects can exist in the absence of significant direct effects. Hence, we also examined indirect effects within the LS sample.

differentiation on each dimension was correlated with identification. Thus, high identifiers emphasized differences on their stereotypical or preferred dimension, and minimized differences on their nonstereotypical dimension. Using this strategy, both high- and low-status groups could positively differentiate themselves from the other on respective dimensions of competence and warmth. Secondly, the HS and LS samples showed strong ingroup favouritism in separate domains of academic and sporting ability, respectively, as predicted (H2). Amongst HS participants, all three ingroup-favouring strategies exerted significantly stronger pulls in the academic domain than the sports domain. The reverse was found amongst LS participants, who discriminated more in the sports domain. Notably, the maximum differentiation strategy was significant in the academic domain but not in the sports domain amongst the HS sample, and the reverse was obtained amongst the LS sample. This is clear evidence that HS participants sought to positively differentiate themselves in the academic domain, while LS participants sought to positively differentiate themselves in the sports domain.

The regression analyses confirmed Hypothesis 3, showing discrimination by HS participants (primarily in the academic domain) was more related to their stereotypes about the groups' competence than warmth, whereas discrimination by the LS sample was more related to their warmth stereotypes. An unexpected finding was that competition had an independent effect such that the more competitive the groups were seen to be, the less ingroup favouritism was shown. This is somewhat counterintuitive and inconsistent with previous theory and research (Sherif, Harvey, White, Hood, & Sherif, 1961). It is difficult to interpret this effect but we suspect it may relate to the way competition was measured and the meaning given to it by participants. For instance, perhaps being competitive for these participants meant being equivalent or comparable in sports and/or academia.

Overall, Study 1 provided good support for our hypotheses. There were, however, a number of limitations. One was that the two domains we chose for assessing discrimination were not equally relevant to the two stereotype dimensions. That is, while the academic domain seemed clearly relevant to competence stereotypes, the sports domain was not clearly relevant to warmth. Therefore, it is not clear whether the LS group discriminated strongly in this domain because it was relevant to their warmth stereotype, or simply because it was a nonacademic domain. A second limitation was that the method used to measure discrimination was rather artificial and complicated. Participants were asked to perform a task that was unfamiliar and not particularly meaningful to them, and it was clear to us that many of them struggled with it. While this method has been used successfully in many studies, and revealed clear and interpretable effects here, it is important to examine these processes using a more meaningful discrimination task. Finally, although we limited our theoretical analysis to status relations that are stable and legitimate, we did not confirm that our empirical context met these conditions. With these issues in mind we conducted a second study in an attempt to replicate and extend the results of Study 1. For this we chose a different intergroup context involving students at relatively high- and low-status universities from the same town in the UK (although a different town to the groups in Study 1). Being located in the same town, students at each university are well informed about each other, and there is a clear status difference between them, evidenced in official league tables and widely shared reputations. Within this context, we used a different measure of discrimination and two different domains. Rather than using point-allocation matrices we asked participants to allocate two pots of government funding to the universities, one for "research capacity" and one for "community outreach." We felt that allocating funds to the two universities would be both relevant and meaningful to our participants. Furthermore, we reasoned that research capacity would be closely associated with competence, while community outreach would be closely associated with warmth. Finally, in addition to measuring perceived status and competition between groups, we included measures of the

perceived legitimacy and stability of the status relation. Our hypotheses for Study 2 were the same as for Study 1.

Study 2

Method

Participants—University student participants were recruited through an email sent to all under-graduate psychology students at the HS university, and through emails sent to students at the LS university via subject organizers in a range of departments. Sixty-four responses from students at the HS university and 47 from the LS university ($N = 111$) were received over a period of two weeks. Twenty percent of each sample was male. All participants in the HS sample were under-graduates in psychology. The LS sample included a range of subject areas and 33% was postgraduate. Consequently, the LS sample was significantly older with a mean age of 25.1 years compared to 19.7 in the HS sample, $t(107) = 5.67, p < .001$.

Procedure—The study was conducted via an online questionnaire, which participants accessed via a link sent with the invitation email. The first page introduced the study as investigating the attitudes, knowledge, and opinions of students at the HS and LS universities (university names were used). The page briefly outlined what was involved in completing the questionnaire and dealt with issues of informed consent. The questionnaire was titled “University Student Survey” and the official logos of each university were displayed across the top of the first page.

On the next two pages, participants provided demographic information including age, gender, degree programme and year of study, and responded to a 6-item scale measuring identification with their university (alphas $> .87$). Two separate pages asked about participants’ knowledge and impressions of students at each university. The order of presentation of these pages was randomized, and the relevant university logo was displayed at the top of the page. First, participants were invited to write freely about any stereotypes they were aware of in relation to students from the university, and to list the main characteristics of students at the university. Following this, they were asked to rate students at the university on traits related to competence and warmth (7-point scales). Four items measured competence (competent, capable, intelligent, efficient) and four measured warmth (warm, friendly, sincere, trustworthy) (all alphas $> .82$).

Intergroup discrimination was measured by asking participants to allocate two pots of government funding to the LS and HS universities. One pot was for “research capacity” and one was for “community outreach.” The research capacity funds were described as “intended to support and develop high-level research projects, particularly those that build links between research and technology, develop new research methods, and explore new research areas.” In contrast, community outreach funds were described as “intended to support and develop projects that provide services to the community, particularly those that are beneficial to minority groups, disadvantaged groups, and groups of lower socio-economic status.” For each pot, participants were asked to allocate a percentage to each university, with the total percentage adding to 100, using adjustable bars positioned next to the name of each university. Thus, allocations within each pot were constrained to sum to 100, but between-pot allocations were independent (e.g., a participant could allocate 100% of each pot to one university). Below the bars for each pot was a text box with the instruction: “Please provide a brief justification or rationale for your decision.”

Finally, participants responded to a set of questions designed to measure perceived competition between universities (e.g., “How likely is it that you will have to compete with

students from the other university for jobs in the future?”), the relative status of each (e.g., “In the context of all UK universities, how prestigious would you say [University X] is?”), and the perceived legitimacy and stability of status relations (e.g., “To what extent do you think the higher prestige of [University X] is justified?”; “How likely is it that [University Y] will become equally or more prestigious than [University X] in the foreseeable future?”). These latter questions were asked only if participants had previously indicated that the HS university was indeed higher status than the LS university. All questions were answered using 7-point scales anchored with “not at all” (1) and “very much” (7).

Results

Social identification and perceptions of status relations—Both groups identified relatively strongly with their respective ingroups; however, the HS sample identified more strongly with their ingroup ($M = 5.73$, $SD = .91$) than the LS sample did with theirs ($M = 4.85$, $SD = 1.62$), $t(109) = 3.63$, $p < .001$. Both samples rated the HS group as significantly more prestigious than the LS group, $F(1, 109) = 265.31$, $p < .001$, $\eta^2 = .71$. However, the LS sample rated the LS group more prestigious ($M = 3.64$, $SD = 1.67$) than did the HS sample ($M = 2.69$, $SD = 1.08$), $F(1, 109) = 16.35$, $p < .001$, $\eta^2 = .13$. The HS sample generally perceived the higher status of the HS group was justified ($M = 5.53$, $SD = .91$) and based on good reasons ($M = 5.70$, $SD = .79$), and that the LS university was unlikely to become equally or more prestigious in the foreseeable future ($M = 3.08$, $SD = 1.33$). The LS sample was more ambivalent with means of 4.05, 4.12, and 3.52 respectively, and larger standard deviations ($SD_s = 1.80, 1.64, 1.81$ respectively). Overall, there was a clear status difference between the groups, which was generally perceived to be stable and legitimate.

H1: Differentiation through stereotypes—Ratings of the perceived competence and warmth of the two universities were subjected to a 2 (group: HS vs. LS) by 2 (trait: competence vs. warmth) by 2 (sample: HS vs. LS) mixed ANOVA with repeated measures on the first two factors. This returned the expected group by trait interaction, $F(1, 109) = 44.20$, $p < .001$, $\eta^2 = .29$, as well as a significant group by sample interaction, $F(1, 109) = 31.16$, $p < .001$, $\eta^2 = .22$, and a trait by sample interaction, $F(1, 109) = 6.75$, $p = .011$, $\eta^2 = .06$. The three-way interaction was not significant, $F < 1$. Simple main effects confirmed H1—the HS sample differentiated the groups on competence, $F(1, 109) = 64.91$, $p < .001$, $\eta^2 = .37$, but not on warmth, $F < 1$, whereas the LS sample differentiated the groups on warmth, $F(1, 109) = 20.50$, $p = .001$, $\eta^2 = .16$, but not on competence, $F < 1$ (see Figure 4 for means). Amongst the LS sample, identification was correlated with positive differentiation on competence ($r = .37$, $p = .006$) and warmth ($r = .55$, $p < .001$). Amongst the HS sample, identification was correlated with positive differentiation on warmth ($r = .28$, $p = .019$) and uncorrelated with differentiation on competence ($r = .06$, $p = .627$).

H2: Intergroup discrimination across domains—Ingroup favouritism scores were computed by subtracting allocations to the outgroup from allocations to the ingroup for each sample and each fund. These scores were analysed using a 2 (sample: HS vs. LS) by 2 (fund: research vs. outreach) mixed ANOVA with repeated measures on the second factor. This returned a significant main effect of sample, $F(1, 109) = 19.09$, $p < .001$, $\eta^2 = .15$, and a significant sample by fund interaction, $F(1, 109) = 50.50$, $p < .001$, $\eta^2 = .31$. The HS sample showed more ingroup favouritism in the research domain ($M = 25.63$, $SD = 26.75$) than the outreach domain ($M = -2.78$, $SD = 16.85$), $F(1, 109) = 43.48$, $p < .001$, whereas the LS sample showed more ingroup favouritism in the outreach domain ($M = 6.94$, $SD = 24.59$) than the research domain ($M = -11.14$, $SD = 26.19$), $F(1, 109) = 13.49$, $p < .001$. Indeed, the HS sample showed some outgroup favouritism in the outreach domain, and the LS sample showed outgroup favouritism in the research domain. Figure 5 shows ingroup favouritism in locations of each fund by each sample.

H3: Relationships between stereotypes and discrimination—Regression analyses to predict ingroup favouritism were conducted in the same manner as for Study 1. Before conducting each regression, we removed cases that were more than 1.96 standard residuals away from the regression line. This excluded four cases from the HS sample and four cases from the LS sample from the first analysis (research funds), and six cases from the HS sample and five from the LS sample from the second analysis (outreach funds). The four regression analyses are summarized in Table 2.

As shown in Table 2, the results were almost identical to those in Study 1 with regard to the relationships between stereotypes and ingroup favouritism. Amongst the HS sample, competence but not warmth stereotypes were significantly related to ingroup favouritism, which occurred primarily in allocations of research funds. Amongst the LS sample, warmth but not competence stereotypes were related to ingroup favouritism. As in Study 1, we conducted tests of the indirect effects of identification on ingroup favouritism via stereotypes using bootstrapping. Amongst the HS sample, neither pathways were significant in either domain. Amongst the LS sample, the indirect pathway through warmth was significant in the outreach domain ($CI_{95}: .10, 4.20$) but the pathway through competence was not ($CI_{95}: -3.54, .14$). Neither path was significant in the research domain. Amongst the LS sample, identification predicted warmth ($\beta = -.612, t = -4.67, p < .001$) but not competence ($\beta = -.160, t = -1.04, p = .306$). Amongst the HS sample, identification did not predict either warmth or competence. As in Study 1, these results provide mixed support for a mediation model. There was a significant path linking identification, warmth, and ingroup favouritism amongst the LS group, but not a corresponding path linking identification, competence, and ingroup favouritism amongst the HS sample.

Discussion

Study 2 closely replicated Study 1, using a different intergroup context and different domains and measures of intergroup discrimination. As in Study 1, HS participants differentiated the ingroup and outgroup on competence but not on warmth, while LS participants differentiated the groups on warmth but not on competence. Again, differentiation in the respective domains was related to identification, with high identifiers emphasizing differences on their preferred dimension while minimizing differences on their “off” dimension. In terms of resource allocations, HS participants showed strong ingroup favouritism in allocating research funds but generally did not discriminate in allocations of outreach funds. Again, their ingroup favouritism was related to competence but not warmth stereotypes. The LS participants showed outgroup favouritism in allocating research funds, and some ingroup favouritism in allocations of outreach funds (though small and not statistically significant), and this was related to warmth but not competence stereotypes. Overall, then, Study 2 yielded virtually identical results to Study 1, except that the LS sample showed clear outgroup favouritism in the research domain and relatively weak ingroup favouritism in the outreach domain. Given the relevance of warmth to community outreach activities, we had expected the LS group to show strong ingroup favouritism in this domain, and for the HS group to perhaps show outgroup favouritism. However, there was relatively little discrimination by either group in the outreach domain. This was surprising given previous research (including Study 1) suggesting that low-status groups show ingroup favouritism in domains unrelated to status (Reichl, 1997). Despite this important difference between Studies 1 and 2, which we discuss further below, it was clear that HS and LS samples differentiated themselves positively on competence and warmth, respectively, and that resource allocations by HS participants were related to competence stereotypes, while those by LS participants were related to warmth. Thus, on the whole, Study 2 was consistent with the argument that high- and low-status groups pursue positive distinctiveness in separate domains of competence and warmth, respectively.

General discussion

We have argued that high- and low-status groups pursue positive distinctiveness in separate domains of competence and warmth—high-status groups pursue positive distinctiveness primarily through competence, and low-status groups primarily through warmth, because these are the domains typically associated with high- and low-status groups. To our knowledge, this is the first attempt to directly link social identity processes underlying intergroup discrimination with stereotype content processes, and to map out the broad domains in which high- and low-status groups pursue positive distinctiveness. The results of both studies provide clear support for our hypotheses, showing that (a) high- and low- status groups positively differentiate themselves primarily in terms of competence and warmth stereo- types respectively, (b) high- and low-status groups show ingroup favouritism in separate domains differentially related to competence and warmth stereotypes, and (c) ingroup favouritism is related to competence stereotypes amongst high-status groups, and warmth stereotypes amongst low- status groups.

A number of theoretical implications follow from this formulation. The first is that these stereotypes, being widely shared and closely linked to objective status indicators, can be understood as cultural resources that constrain high- and low-status groups' pursuit of positive social identity. They play a role in defining the social spaces— social roles, identities, and relationships—that high- and low-status groups can adopt, and since both dimensions are evaluatively positive, they attract group members into these spaces in their pursuit of positive social identities (Eagly, 1987; Glick & Fiske, 2001b). This is consistent with the idea, shared by a number of contemporary theories (Eagly, 1987; Glick & Fiske, 2001a; Jost & Banaji, 1994; Kay & Jost, 2003; Kay et al., 2005; Tajfel, 1981), that stereotypes function to maintain and legitimize existing social arrangements. However, it also highlights the role of social identity in leading members of low-status groups to adopt particular roles and identities. The perpetuation of existing status and power relations is not driven entirely by implicit or explicit sanctions and rewards (Eagly, 1987; Glick & Fiske, 2001b), but also by low-status groups being drawn to these roles and identities because they provide a source of positive social identity.

Although both competence and warmth can provide a source of positive social identity, they are not equivalent stereotype dimensions. They differ at least in that competence is strongly tied to objective status relations and is thus relatively confirmable. Warmth, on the other hand, is less tied to objective indicators and is thus less (dis)confirmable (Tausch et al., 2007). What this means is that high-status groups have a double advantage. First, they are able to claim both competence and warmth, while low-status groups can only claim warmth. To the extent that these dimensions form the basis for group evaluations and intergroup discrimination, this places high-status groups at a distinct advantage. Second, the link between competence and objective status may mean that competence is perceived as a more valid basis for discrimination than warmth. In our studies, the high-status groups could presumably justify ingroup favouritism through their stereotypical competence, particularly in competence-relevant domains, whereas the low-status groups could not. In fact, they even showed outgroup favouritism in Study 2. On the other hand, when we used a domain we thought was closely linked to warmth (community outreach), there was little ingroup favouritism on the part of the low-status group. We interpret this as indicating that warmth does not provide a basis for strong ingroup favouritism on a material level. Indeed, the very nature of warmth as a component of identity may work against discrimination as it may be seen to contradict what it means to be friendly, sincere, and sociable. It has been argued that this is one reason why stereotyping low-status groups as warm works to maintain existing social inequalities (Glick & Fiske, 2001a; Jost & Banaji, 1994). Thus, even if warmth

provides a sense of positive social identity, it may not provide a basis for changing material realities.

Of course, this does not explain the strong ingroup favouritism displayed by the low-status group in the sports domain in Study 1. It could be that this was a particularly important aspect of that group's identity, and that they actually were objectively superior to the high-status group in sports. Unfortunately we did not check this. Another difference between Studies 1 and 2 is that the point-allocation task in Study 1 was purely symbolic and explicitly associated with performance in each domain, whereas the allocation-task in Study 2 was more realistic and meaningful. Even though participants' allocations were non-consequential, the task itself resembled very real decisions often made at the government level, which have real consequences for universities. For this reason, we would be more confident in generalizing the findings of Study 2 to realistic contexts in which important material resources are at stake.

Beyond these broad implications, the current studies inform the mechanisms underlying inter-group discrimination. SIT argues that discrimination is motivated by a need for positive and distinctive social identity. We found some evidence for this, but stereotypes were consistently stronger predictors of ingroup favouritism than identification. These data point towards a moderated mediation model (Muller, Judd, & Yzerbyt, 2005), in which the effect of identification on intergroup discrimination is mediated by competence stereotypes amongst high-status groups, but warmth stereotypes amongst low-status groups. We probed this possibility with indirect effects analyses, but results were mixed. Identification did not consistently predict ingroup favouritism, and there was no evidence for an indirect effect of identification on ingroup favouritism via competence stereotypes. Further research should aim to clarify the relationships between identification, stereotypes, and ingroup favouritism in legitimate status systems.

How, then, should we understand the relationships between status, identification, stereotypes, and discrimination found in our studies? We think that intergroup discrimination is motivated by a need for positive social identity but that it needs to be justified. Stereotypes, particularly of competence, can be used to justify discrimination, but since they are tied to objective status indicators, only high-status groups can claim competence, and thus discriminate, in stable and legitimate status systems. Low-status groups can claim warmth, but this is less (dis)confirmable and does not seem to provide a strong basis for discrimination in resource allocations. Warmth may provide low-status groups with a sense of positive social identity but it may not provide a good basis for changing material realities.

Conclusion

These studies provided clear evidence that high- and low-status groups pursue positive distinctiveness in separate domains of competence and warmth, respectively. This is consistent with earlier work in social identity theory showing that high-status groups show ingroup favouritism in status-relevant domains and low-status groups in status-irrelevant domains (Bettencourt et al., 2001; Brewer, 1979; Mullen et al., 1992; Reichl, 1997; Sachdev & Bourhis, 1985, 1987, 1991). However, this previous work has not attempted to systematically define the domains that are status-relevant and status-irrelevant, and thus the general domains in which high- and low-status groups pursue positive distinctiveness. The stereotype content model identifies these domains as competence and warmth, and thus suggests that these are domains in which high- and low-status groups generally pursue positive social identity. At least in stable and legitimate status systems, these stereotypes in effect define the dimensions on which groups can seek positive distinctiveness, constraining

and justifying discrimination for high- and low-status groups. Identification may provide the motivation for intergroup discrimination, but stereotypes channel and direct such motives. At the same time, this research highlights a double-edged sword that places low-status groups at a distinct disadvantage—while they may derive a sense of positive identity from stereotypes of warmth, these stereotypes don't seem to enable them to act on the material realities that often define status relations.

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Figure 1.
Ratings of the competence and warmth of HS and LS groups.

Figure 2.
Pull scores of the three ingroup favouring-allocation strategies within each domain by participants in the HS and LS groups.

Figure 3.
Ingroup favouritism in point allocations (ingroup minus outgroup) by each sample within each domain.

Figure 4.
Ratings of the competence and warmth of HS and LS groups.

Figure 5.
Ingroup favouritism in resource allocations (ingroup minus outgroup) by each sample within each domain.

Summary of regression analyses showing proportions of explained variance in ingroup favouritism at Steps 1 and 2, and beta weights of significant predictors (Study 1)

Table 1

Sample	Domain of discrimination	R ² at Step 1 (Status, identification, competition)	R ² change at Step 2 (Stereotypes)	Total R ²	Significant predictors in final model and their beta weights in Steps 1 and 2	Step 1 β	Step 2 β
HS Sample	Academia (n = 64)	.286**	.112**	.398**	Identification	.335**	.221 [^]
					Competition	-.379**	-.350**
					Competence	—	.303**
LS Sample	Sports (n = 65)	.127**	.045	.172*	Identification	.324**	.244 [^]
	Academia (n = 96)	.049	.103**	.152*	Competition	-.194 [^]	-.200*
					Warmth	—	.333**
	Sports (n = 95)	.056	.137**	.193**	Competition	-.185 [^]	-.196*
					Warmth	—	.389**

Note

[^] p < .10;

* p < .05;

** p < .01.

Table 2

Summary of regression analyses showing proportions of explained variance in ingroup favouritism at Steps 1 and 2, and beta weights of significant predictors (Study 2)

Sample	Domain of discrimination	R ² at Step 1 (Status, identification, competition)	R ² change at Step 2 (Stereotypes)	Total R ²	Significant predictors in final model and their beta weights in Steps 1 and 2	Step 1 β	Step 2 β
HS Sample	Research Funds (<i>n</i> = 60)	.108 [^]	.106 [*]	.214 [*]	Status	.293 [*]	.214
					Competence	—	.316 [*]
					Status	.204	.239 [^]
LS Sample	Outreach funds (<i>n</i> = 58)	.059	.014	.073			
	Research funds (<i>n</i> = 43)	.425 ^{**}	.048	.473 ^{**}	Identification	.351 ^{**}	.174
					Status	-.506 ^{**}	-.588 ^{**}
					Warmth	—	.285 [^]
	Outreach funds (<i>n</i> = 42)	.009	.127 [^]	.136	Warmth	—	.402 [*]

Note:

[^] *p* < .10;

^{*} *p* < .05;

^{**} *p* < .01