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This is the final peer-reviewed author's accepted manuscript (postprint) of the following publication:

This version is available at: https://hdl.handle.net/11585/612545 since: 2017-12-01

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Different Size, Different Language? Linguistic Ingroup Favoritism and Outgroup Derogation by Majority and Minority Groups

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Abstract

This study examines the impact of relative group size on linguistic ingroup favoritism and outgroup derogation.

Members of minority, majority and equal size groups freely described outcome allocations made by either ingroup or outgroup members. The abstraction and valence of the terms used were analyzed. Majority members expressed ingroup favoritism by describing the majority ingroup with positive terms at a higher level of abstraction than negative terms. They also provided more favorable descriptions of ingroup members than minority members did. Minority members expressed ingroup favoritism, but also outgroup derogation, by referring to the majority outgroup with negative terms at a higher level of abstraction than positive terms. These findings highlight the distinct consequences of minority and majority memberships on these two facets of intergroup discrimination.

In most intergroup contexts, groups hold minority vs. majority positions vis-à-vis each other (Farley, 1982; Tajfel, 1981). Research has shown that numerically smaller groups are usually more prone to ingroup favoritism than larger groups (Hewstone, Rubin, & Willis, 2002; Mullen, Brown, & Smith, 1992; Simon, Aufderheide, & Kampmeier, 2001). However, no studies have examined the less benign facet of intergroup discrimination, namely, outgroup derogation (Brewer, 1999) in the context of majority-minority relationships. Moreover, previous studies have mainly considered explicit forms of discrimination (e.g., Leonardelli & Brewer, 2001; Sachdev & Bourhis, 1984) neglecting less controllable measures. Basing on the evidence that the analysis of abstraction and valence in free language use allows to examine the double-faceted phenomenon of linguistic intergroup discrimination (Rubini, Menegatti, & Moscatelli, 2014; Prati, Menegatti, & Rubini, 2015), the present study aims to analyze the effects of relative group size on ingroup favoritism and outgroup derogation expressed at an implicit level through language.

Minority-Majority Effects on Intergroup Discrimination

Research on the effects of socio-structural characteristics of groups has highlighted that group size per se – independent of variables such as group status or group power – has important consequences for members' behavior (e.g., Erb, Hilton, Bohner, & Roffey, 2015; Imhoff & Erb, 2009; Lücken & Simon, 2005; Simon et al., 2001). Minorities have consistently been found to show higher ingroup bias than majorities (Bettencourt, Miller, & Hume, 1999; Hewstone et al., 2002; Liebkind, Henning-Lindblom, & Solheim, 2008). For instance, Sachdev and Bourhis (1984) reported that minorities were less parity-oriented than majorities in intergroup allocations of symbolic resources, whereas majorities were more concerned about maintaining differentials between the groups. Minorities – but not majorities – also show ingroup bias in the allocation of negative outcomes (e.g., Otten, Mummendey, & Blanz, 1996), which can be considered as a more heinous means of discrimination than resource allocation, as it implies burdening the outgroup rather than just being more generous towards the ingroup[1] (Moscatelli & Rubini, 2013). For their part, majorities show lower intergroup bias than minorities, or even no bias at all (Liebkind et al., 2008; Mummendey & Simon, 1989).

According to a social identity account, minorities are more discriminatory than majorities as minorities need to compensate for their insecure position (Ellemers, Doosje, van Knippenberg, & Wilke, 1992; Tajfel & Turner, 1979). A cognitive explanation claims instead that numerical distinctiveness elicits a higher focus on the ingroup,

which in turn leads to higher ingroup identification and stronger ingroup bias (Lücken & Simon, 2005; Otten et al., 1996). Conversely, optimal distinctiveness theory (Leonardelli, Pickett, & Brewer, 2010) maintains that minority membership meets individuals' need of inclusiveness within the group, as well as the need for intergroup differentiation, better than membership in larger groups. Accordingly, discrimination by minority groups is driven by motives of ingroup support, whereas majority members are more concerned with enhancing ingroup distinctiveness.

Ingroup Favoritism and Outgroup Derogation in Spontaneous Language Use

Previous research has not examined whether and how relative group size influences intergroup discrimination conveyed through language. In this respect, studies on linguistic intergroup bias (Maass, 1999; Wigboldus & Douglas, 2007) have shown that individuals describe ingroup desirable behaviors and outgroup undesirable behaviors in more abstract terms than ingroup undesirable and outgroup desirable behaviors – thus facilitating the generalization of ingroup positive and outgroup negative, but inhibiting the generalization of ingroup negative and outgroup positive features across different contexts and time (Menegatti & Rubini, 2012, 2013, 2014; Semin & Fiedler, 1988). Although under specific conditions individuals can control linguistic bias (for instance, if they provide descriptions in a comparative framework; Douglas, Sutton, & Wilkin, 2008), neither communicators nor recipients are aware of such a strategic use of language (Maass, Castelli, & Arcuri, 2000).

Interestingly for our purposes, a series of minimal group studies have highlighted that even members of minimal groups described behaviors – resource or negative outcome allocations – performed by ingroup members with more abstract positive terms and more concrete negative terms than the same behaviors performed by outgroup members (Moscatelli & Rubini, 2011; Rubini, Moscatelli, & Palmonari, 2007). Moreover, overall groups having a superior/inferior position to the outgroup in terms of power or status use language in a discriminatory fashion, whereas equal power/equal status groups do not (Moscatelli, Albarello, & Rubini, 2008; Rubini, Moscatelli, Albarello, & Palmonari, 2007).

Importantly, these studies have pointed out that through systematic variations of abstraction and valence of terms in free language use, individuals can express favoritism towards the ingroup or derogation against the outgroup in response to different intergroup conditions (Prati et al., 2014; Rubini et al., 2014). Indeed, individuals can focus on positive features of the ingroup by describing the ingroup with positive terms at a higher levels of abstraction than

negative terms, or they can emphasize negative features of the outgroup by describing it with negative terms at a higher level of abstraction than positive terms (Moscatelli & Rubini, 2011; Rubini et al., 2014). For instance, Moscatelli, Albarello, Prati, and Rubini (2014) found that relatively gratified groups expressed linguistic ingroup favoritism, whereas relatively deprived groups – possibly because of their stronger discontent – showed linguistic derogation in the descriptions of the relatively gratified outgroup. Thus, one may wonder how membership in groups who differ in their relative group size would affect the two facets of linguistic discrimination. Although a study by Guinote (2001) found that minority and majority members use linguistic abstraction as a means to convey perceived ingroup and outgroup homogeneity, to date no research has analyzed how abstraction and valence of language are used by members of majority and minority groups as means of linguistic intergroup discrimination.

The Present Experiment

The present study aims to test the effects of relative group size on linguistic ingroup favoritism and outgroup derogation. Members of equal-size, majority, and minority groups – created by modifying the minimal group paradigm (Tajfel, Billig, Bundy, & Flament, 1971) – freely described the choice made by either an ingroup or an outgroup member (i.e., the target) in distributing negative outcomes (cf. Moscatelli & Rubini, 2011). As mentioned, according to optimal distinctiveness theory (Leonardelli & Brewer, 2001) majorities are more motivated than minorities to obtain positive ingroup distinctiveness. On this basis, we expected that the language used by majority members would mainly express ingroup favoritism, with descriptions of ingroup members being characterized by positive terms at a higher level of abstraction than negative terms (*hypothesis 1a*). We expected no outgroup derogation in this condition, that is, no difference in the abstraction of positive and negative terms used in outgroup descriptions (*hypothesis 1b*).

As minorities are usually more discriminatory than majorities even when discrimination implies assigning negative outcome to the outgroup (Mummendey et al., 1992; Otten et al., 1996), we might expect that minority groups would use linguistic ingroup favoritism (*hypothesis 2a*) but also linguistic outgroup derogation in descriptions of the majority outgroup (*hypothesis 2b*). This hypothesis is in line with social identity's assumption that members of minority groups discriminate to compensate for their insecure position (Tajfel & Turner, 1976), as well as with the cognitive account of minorities' discrimination (Simon et al., 2011). In line with previous evidence that members of

mere categories do not show linguistic discrimination in descriptions of negative outcome allocations (Moscatelli & Rubini, 2011; Moscatelli et al., 2014), no ingroup favoritism or outgroup derogation was expected in the equal size condition (*hypothesis 3*).

Whereas the above hypotheses concerned the prevalent facet of linguistic discrimination expressed by groups of different size – and require a focus on the language used *within* each group condition – it is possible to advance predictions with respect to differences in descriptions of ingroup and outgroup members provided by majority, minority and equal size groups. First, in line with the hypothesis of outgroup derogation by minority groups, we expected that minorities would depict outgroup members less favorably – i.e., with negative terms at a higher level of abstraction and/or positive terms at a lower level of abstraction – than majorities would (*hypothesis 4a*). Although we expected ingroup favoritism by both majority and minority groups, it is possible that majorities – because of their higher motivation to establish positive ingroup distinctiveness (Leonardelli & Brewer, 2001) – would show more favorable descriptions of the ingroup than minorities would by using positive terms at a higher level of abstraction, and/or negative terms at a lower level of abstraction (*hypothesis 4b*). Both majority and minority groups should show more favorable descriptions of the ingroup, and less favorable descriptions of the outgroup, compared to equal size groups (*hypothesis 5*).

As a further test of group size effects, in the present study participants made an explicit rating of the extent to which they desired the ingroup to receive favorable outcomes, or the outgroup unfavorable outcomes, in the allocation task. We expected that both majorities and minorities would report higher desire for ingroup favoritism than equal size groups (*hypothesis 6a*). Minorities should also report higher desire for outgroup derogation than the other groups (*hypothesis 6b*). As minorities usually identify more with the ingroup than majorities do (e.g., Leonardelli & Brewer, 2001; Lücken & Simon, 2005; Otten et al., 1996), in this study we measured ingroup identification as a check on the efficacy of group size manipulation. Although most studies on the LIB have reported no correlation between linguistic abstraction and self-report measures (Maass, 1999; Maass et al., 2000), we also tested whether identification was related to ingroup favoritism and/or outgroup derogation under different group size conditions.

Method

Participants and Procedure

One hundred and fifty-three first-year university students volunteered to take part in this study. Participants were tested in groups of approximately 12 people, randomly assigned to conditions. As eleven participants failed to provide codifiable sentences, the final sample was composed by one hundred and forty-two participants (71.1% females, 28.9% males, $M_{age} = 21.59$, $SD = 4.30$)[2].

Relative group size was manipulated via information about the alleged proportion of participants characterized by different but equally valuable perceptual styles – called Locomotors and Assessors – within each experimental session. Locomotors were described as quicker and Assessors as more accurate in information processing (cf. Kruglanski et al., 2000). Perceptual style was allegedly assessed by asking participants to rate the extent to which a list of emotions could be attributed to the persons portrayed in a series of pictures. A co-experimenter ostensibly scored participants' rating, and gave to each of them a sheet reporting his/her perceptual style. No one could see the style of others as participants sat at different tables.

In the equal size condition, participants were told that each perceptual style comprised almost the same number of participants, thus ingroup and outgroup were of the same size. In the other conditions, the experimenter announced that almost 80% of participants in the experimental session were characterized by a certain style (majority condition), whereas the remaining 20% were characterized by the other style (minority condition). Thus, groups in the majority condition were compared to a minority outgroup. Conversely, groups in a minority condition were compared to a majority outgroup. Majority and minority style were balanced across sessions.

Afterwards, the experimenter explained that participants should decide on the duration of the unpleasant noise (the sound of a dentist's drill) to be listened to through headphones by other participants in a further experimental session. To this end, they used an allocation matrix, consisting of thirteen boxes. Each box contained two numbers: One representing the seconds of noise to be allocated to a member of the ingroup (top row) and the other for the outgroup (bottom row). The boxes at the two extremes of the matrix represented the choices of parity (14/14) and maximum ingroup favoritism (i.e., minimum duration of noise to the ingroup member; 2/26). We used only a single matrix as a means to create stimuli for open-ended descriptions, rather than, as in the standard minimal

group paradigm (e.g., Bourhis, Sachdev, & Gagnon, 1994; Otten et al., 1996) having participants complete multiple matrices.

At the end of the allocation task, the matrices were collected and placed on a table, where the co-experimenter was allegedly preparing new booklets by adding a matrix to each of them. Booklets were then distributed. Each contained a matrix allegedly completed by either an ingroup or an outgroup member, who had favored his/her group by circling the 2/26 box. We employed this choice as stimulus for linguistic descriptions as in previous studies it turned out to elicit clearer patterns of linguistic discrimination than other choices such as the more socially desirable choice of parity (Blanz, Mummendey, & Otten, 1997) or the less frequent choice of outgroup favoritism (Moscatelli et al., 2008; Moscatelli & Rubini, 2011; Rubini et al., 2014). On a separate page, participants were provided with five lines of space in which to explain the target allocation choice. Finally, they filled in a questionnaire containing measures of desire for ingroup favoritism and outgroup derogation, ingroup identification and manipulation checks. Debriefing took place at the end of each experimental session.

Dependent Variables

Linguistic abstraction. Two independent coders, blind to experimental conditions, coded participants' descriptions. Following Semin and Fiedler's (1988) and Maass et al.'s (1989) procedure, coders distinguished between descriptive action verbs (DAVs), interpretative action verbs (IAVs), state verbs (SVs) and adjectives (ADJs)[3]. Coders also coded the semantic valence of the predicates (positive vs. negative) by referring to the positive/negative evaluations of the behaviors that could be inferred from participants' descriptions (cf. Moscatelli & Rubini, 2011). Forty-four sentences, equally distributed between ingroup and outgroup descriptions, were not considered as they did not refer to the target (e.g., "I do not know"). The inter-coder agreement was high (Cohen's κ = .90 for predicate categorization and κ = .90 for predicate valence). Disagreement was solved by discussion. On average, each participant used 1.58 (SD = 0.88) positive terms and 1.42 (SD = 0.68) negative terms. Analyses of variance on the arcsine-transformed proportions of positive and negative terms (cf. Moscatelli et al., 2014) showed that the proportions of positive or negative terms did not significantly vary as a function of group size condition, Fs > 1.79, ps > .152.

Desire for ingroup favoritism and outgroup derogation. Participants indicated on a 7-point scale (1 = *not at all*; 7 = *very much*) how much they would like ingroup members to receive fewer seconds of noise than outgroup

members (desire for ingroup favoritism), and how much they would like outgroup members to receive more seconds of noise than ingroup members (desire for outgroup derogation).

Ingroup identification and manipulation checks. Participants reported their group membership and indicated the relative size of their group. Ingroup identification was measured by means of four items (e.g., "I am pleased to be a member of this group"; 1 = *not at all*; 7 = *very much*; α = .72). Finally, in order to test whether majorities were perceived as having higher status than other groups, participants were asked whether their group had lower/higher prestige than the outgroup (1 = *much lower*; 7 = *much higher*).

Results

Manipulation Checks and Ingroup Identification

All participants correctly reported their group membership and ingroup size. As further evidence that we successfully manipulated relative group size, a 3 (relative group size) × 2 (target group membership) analysis of variance (ANOVA) on ingroup identification showed a main effect of relative group size, $F(2, 136) = 11.81$, $p < .001$, $\eta^2 = .148$, due to the higher identification reported by minorities compared to the other groups, $p < .001$ at post hoc Scheffé comparison ($M_{\text{equal size}} = 4.54$, $SD = 0.75$; $M_{\text{majority}} = 4.58$, $SD = 0.92$; $M_{\text{minority}} = 5.29$, $SD = 0.84$). No other effects were significant, $Fs < .77$, $ps > .462$. The analysis of variance on the ingroup status measure produced no significant effect, $Fs < 1.20$, $ps > .305$ ($M_{\text{equal size}} = 4.15$, $SD = 1.41$; $M_{\text{majority}} = 3.94$, $SD = 1.72$; $M_{\text{minority}} = 3.96$, $SD = 1.79$), supporting that the group size manipulation did not lead to perceive the groups as varying in their prestige.

Linguistic Abstraction

For each participant, positive and negative abstraction indexes were computed. Considering positive and negative terms separately, weights of 1, 2, 3, and 4 were assigned to DAVs, IAVs, SVs, and ADJs, respectively. The summed weights were then divided by the total number of terms used. Scores on each index ranged from 1 (lowest abstraction) to 4 (highest abstraction). Scores were submitted to a 3 (relative group size) × 2 (target group membership) × 2 (valence of language) ANOVA, with the last factor within-participants. Since preliminary analyses showed no effect of gender or perceptual style on the dependent variables, they were not considered in the analyses. The analysis showed a significant group size × valence of language interaction, $F(2, 136) = 3.10$, $p = .048$, $\eta^2 = .044$,

and a significant target group membership × valence of language interaction, $F(2, 136) = 27.92$, $p < .001$, $\eta^2 = .170$. These interactions were qualified by a significant three-way interaction, $F(2, 136) = 4.89$, $p = .009$, $\eta^2 = .067$ (see Figure 1). The interaction was decomposed by pairwise comparisons (based on the Bonferroni test) to test the specific hypotheses.

Insert Figure 1

In order to test whether majority and minority groups differed in the extent and type of discrimination that they show, we compared the abstraction of positive vs. negative terms referring to ingroup or outgroup within each group size condition (i.e., where majorities rated minorities, and vice-versa; whereas equal-size groups rated each other). All predictions were supported. Majorities showed ingroup favoritism, with positive terms used in ingroup descriptions being at a higher abstraction than negative terms, $p < .001$, $d = 1.131$ (hypothesis 1a). No outgroup derogation occurred in the majority condition, $p = .370$ (hypothesis 1b). Minorities, too, showed ingroup favoritism as revealed by the higher abstraction of positive vs. negative terms in ingroup descriptions, $p = .011$, $d = 0.981$ (hypothesis 2a). As expected, minorities also showed derogation against the majority outgroup by describing the latter with negative terms at a higher level of abstraction than positive terms , $p < .001$, $d = 0.453$ (hypothesis 2b). Supporting hypothesis 3, no ingroup favoritism, $p = .215$ nor outgroup derogation, $p = .727$ occurred in the equal size condition.

With respect to the comparison between the majority and the minority conditions, as expected (hypothesis 4a) minorities described the outgroup less favorably than majorities did by using negative terms at a higher abstraction, $p < .001$, $d = 0.638$. The two conditions did not differ with respect to positive terms referring to the outgroup, $p = 1.00$. Moreover, majorities described the ingroup more favorably than minorities did by employing positive terms at a higher level of abstraction, $p < .001$, $d = 0.676$ (hypothesis 4b). No difference was found with respect to negative terms referring to the ingroup, $p = .472$.

Overall both majority and minority groups used language in a more discriminatory fashion than equal-size groups (hypothesis 5). Majorities described the ingroup more favorably than equal size groups did by using positive

terms at a higher level of abstraction ($M_{equal\ size}$ = 1.81, SD = 0.93; $M_{majority}$= 2.45, SD = 0.92), p = .009, d = 0.692. Majorities also described the outgroup with negative terms at a higher level of abstraction than equal size groups ($M_{equal\ size}$= 1.40, SD = 0.62; $M_{majority}$ = 1.84, SD = 0.90), p = .045, d = 0.569. The two conditions did not differ with respect to negative terms referring to the ingroup ($M_{equal\ size}$= 1.47, SD = 0.73; $M_{majority}$ = 1.48, SD = 0.79), p = 1.00, or positive terms referring to the outgroup ($M_{equal\ size}$= 1.49, SD = 0.56; $M_{majority}$= 1.59, SD = 0.84), p = 1.00. Minorities depicted the outgroup less favorably than equal size groups did by using negative terms at a higher level of abstraction (M = 2.72, SD = 0.94), p < .001, d = 1.658, whereas no difference was found with respect to positive terms referring to the outgroup ($M_{minority}$ = 1.55, SD = 0.87), p = 1.00. The two conditions did not differ with respect to positive ($M_{minority}$= 1.84, SD = 0.87), p = 1.00 or negative terms ($M_{minority}$ = 1.17, SD = 0.79), p = .538 referring to the ingroup[4].

Finally, correlation analyses were run to assess whether within each group size condition, positive and negative abstraction scores were related to ingroup identification. The analyses revealed that in the equal size condition, ingroup identification was negatively correlated with the abstraction of negative terms employed in ingroup descriptions, r = -.482, p = .023. No other correlation was significant in this condition, ps > .140. Ingroup identification and the abstraction scores were not correlated either in the majority, ps > .070, or in the minority condition, ps > .462. Ingroup identification was also entered as covariate in a 3 (relative group size) × 2 (target group membership) × 2 (valence of language) ANCOVA. The analysis revealed no significant relationship between the covariate and the dependent variables, $F(1, 135)$ = 0.812, p = .369.

Desire for Ingroup Favoritism or Outgroup Derogation

A 3 (relative group size) × 2 (target group membership) ANOVA on the desire for ingroup favoritism showed a main effect of group size, $F(2, 136)$ = 15.93, p < .001, η^2 = .190. Supporting hypothesis 6a, members of both majority and minority groups showed higher desire for ingroup favoritism than members of equal size groups ($M_{equal\ size}$ = 4.23, SD = 1.37, $M_{majority}$= 5.49, SD = 0.92; $M_{minority}$ = 4.87, SD = 1.05), ps < .025. Moreover, majorities reported higher desire for ingroup favoritism than minorities did, p < .001. No other effects were significant, Fs < 2.71, ps > .102. As expected (hypothesis 6a), the desire for outgroup derogation was higher in minority than in other conditions, $F(2, 136)$ = 4.86, p = .009, η^2 = .067 ($M_{equal\ size}$ = 3.72, SD = 1.28, $M_{majority}$= 3.73, SD = 1.45; $M_{minority}$ =

4.54, $SD = 1.60$), $ps = .027$. No other effects were significant, $Fs < 1.14$, $ps > .287$. Correlational analyses involving the desire for ingroup favoritism, the desire for outgroup derogation and the abstraction indexes, run considering each group size condition separately, produced no significant results.

Outcome Allocations

Although the allocation task was just a means to obtain linguistic descriptions, participants' choices were scored 1 (parity) to 13 (maximum ingroup favoritism) and submitted to a one-way ANOVA, which showed no effect of group size, $F(2, 137) = 0.86$, $p = .427$ ($M_{\text{equal size}} = 3.09$, $SD = 3.64$; $M_{\text{majority}} = 3.20$, $SD = 4.16$; $M_{\text{minority}} = 4.11$, $SD = 4.09$). To examine whether participants' own allocation choice affected their use of language, the allocation scores were entered as covariate in a 3 (group size) × 2 (target group membership) × 2 (valence of language) ANCOVA on linguistic abstraction scores. The analysis revealed no significant relationship between the covariate and the dependent variables, $F(1, 133) = .02$, $p = .899$.

Discussion

This study examined for the first time how variations in relative group size influence ingroup favoritism and outgroup derogation in free language use. Findings showed that the mere fact of belonging to a group that differs in its size from an outgroup leads members to use language in a biased way, whereas equal size groups do not show linguistic discrimination. The most novel finding of this study was that majorities and minorities differed in terms of the linguistic discrimination they evidenced. Majorities showed ingroup favoritism by describing ingroup members with positive terms at a higher level of abstraction than negative terms. Minority groups, too, expressed linguistic ingroup favoritism. However, comparisons between the two conditions revealed that majorities provided more favorable descriptions of ingroup members by using positive terms at a higher level of abstraction than did minorities. These results are in line with predictions based on optimal distinctiveness theory (Leonardelli & Brewer, 2001) as majorities appeared more concerned than minorities with establishing a positive ingroup distinctiveness by maximizing the stability of positive ingroup features. Supporting this contention, in the present study majorities also reported a higher desire for ingroup favoritism than both minorities and equal size groups. No linguistic outgroup derogation occurred in majority groups.

For their part, minority members did show outgroup derogation. Indeed, they described the majority outgroup with negative terms at a higher level of abstraction – implying a higher stability of its negative features – than positive terms. This is a novel finding in the literature on group size effect, and it is further supported by the higher desire for outgroup derogation reported by minorities compared to the other types of groups. Of course, the implicit nature of the linguistic measure employed in this study has likely allowed individuals to overcome the normative constraints that inhibit overt outgroup derogation. Namely, whereas individuals may refrain from showing outgroup derogation with more explicit measures, in this study participants could have intentionally chosen the valence of terms but were hardly able to monitor abstraction (cf. Douglas et al., 2008).

The linguistic outgroup derogation expressed by minority groups can be accounted for by a social identity account (Tajfel & Turner, 1979). Indeed, minorities might have tried to transmit unfavorable images of the outgroup as a way to compensate for their numerical disadvantage. This finding is also in line with predictions based on the cognitive account of minority discrimination (Lücken & Simon, 2005). In fact, the awareness that few individuals in the experimental setting belonged to the same group as themselves may have led minority members to be more concerned with their ingroup – as supported by the higher ingroup identification reported by minority groups compared to other groups – and to derogate the outgroup when they were presented with behaviors performed by majority group members. Conversely, following optimal distinctiveness theory the higher sense of ingroup inclusiveness elicited by minority membership should actually *reduce* outgroup derogation (Leonardelli et al., 2010). Thus, overall optimal distinctiveness theory better explains ingroup favoritism shown by majority and minority groups, whereas the social identity and the cognitive account seem to provide a better explanation of outgroup derogation shown by minority groups.

Further studies should address this issue by examining the mechanisms underlying minorities' outgroup derogation. Although in this study we measured ingroup identification, we were not able to assess whether this variable accounted for linguistic outgroup derogation, as identification and abstraction scores were not related. This absence of correlation is in line with previous evidence on the LIB, and it is generally attributed to the varying degrees of intentional control individuals can exert on linguistic abstraction or on the more overt self-report measures (Maass et al., 2000; Rubini et al., 2014). However, in principle, different theoretical accounts would lead to different predictions

with respect to the relationship between identification and minorities' outgroup derogation. From a social identity perspective (Ellemers et al. 1992; Tajfel & Turner, 1979) one should expect a positive correlation between the two measures – i.e., the more members identify with the ingroup, the more they should try to obtain a positive social identity, even by downgrading the outgroup. A similar finding could be expected based on the cognitive account, as minorities' higher focus on the ingroup should result in outgroup derogation (Lücken & Simon, 2005; Otten et al., 1996). However, as mentioned, optimal distinctiveness theory claims that minorities' greater satisfaction might prevent them from derogating the outgroup (Leonardelli et al., 2010). Accordingly, one should expect no correlation – or even a negative correlation – between the strength of minority ingroup identification and outgroup derogation. It is therefore important that further research assesses the relationship between ingroup identification and outgroup derogation by employing a different, less implicit measure of minorities' motivation to hurt the outgroup (e.g., de Dreu, 2010; Halevy, Chou, Cohen, & Bornstein, 2010; Weisel & Böhm, 2015).

Future studies could also test the role of other variable as possible mediators of minorities' outgroup derogation. For instance, they could test whether minorities feel threatened due to their numerical inferiority. In this respect, one might wonder whether in this study minorities reacted with outgroup derogation as they felt more threatened than majorities (e.g., Islam & Hewstone, 1993) by the specific stimulus behavior we employed, that is, ingroup favoritism shown by the outgroup. Although the procedure we used to obtain linguistic descriptions was similar to that of previous studies (e.g., Moscatelli et al., 2014), further studies should therefore consider less extreme choices as stimuli for descriptions. In line with previous evidence that minimal group members favor the ingroup if they expect the ingroup to favor them, and discriminate against the outgroup if they expect to receive less favorable treatment by the outgroup (e.g., Locksley, Ortiz, & Hepburn, 1980), one may also speculate that in this study linguistic patterns of ingroup favoritism and outgroup derogation might represent an attempt at "reciprocating" the allocation choices allegedly made by ingroup and outgroup members. In addition, although in this study participants' own allocations were not associated with linguistic abstraction scores, it is possible that participants – as their own choices were closer to the parity end than to the ingroup favoritism end of the matrix – found the allocation choice they had to explain quite surprising. Thus, future studies might test the impact of relative group size on linguistic ingroup favoritism and outgroup derogation by using different stimulus-behaviors.

Finally, in this study relative group size did not affect participants' allocation choices. This could be due to the fact that we employed a single allocation matrix as a means to create stimuli for open-ended descriptions rather than to measure intergroup bias. In fact, the measurement of intergroup bias in allocation behavior would instead require the use of several matrices in order to calculate the extent to which a specific allocation strategy (e.g., ingroup favoritism) dominates over another (e.g., parity; see for instance Bourhis et al., 1994).

To conclude, these findings add to the literature on linguistic discrimination as they show for the first time that besides group status and group power (Moscatelli et al., 2008; Rubini et al., 2014; Rubini, Moscatelli, Albarello et al., 2007), the relative size of groups is also a powerful antecedent of a biased use of language. In this respect, Moscatelli et al. (2008) reported that differential group status mainly triggered linguistic outgroup derogation, although higher status groups also showed linguistic ingroup favoritism. Asymmetries in group power affected linguistic favoritism only, although this was possibly due to the fact that in that study group members were able to discriminate at a behavioral level before providing linguistic descriptions (Rubini et al., 2014; Rubini, Moscatelli, Albarello et al., 2007). Thus, findings of the present studies support the importance of considering the effects of group size per se (Hewstone et al., 2002; Lücken & Simon, 2005; Sachdev & Bourhis, 1984, 1991) in that they reveal that majority and minority membership have distinct and predictable consequences on these two facets of discrimination. At the same time, these results contribute to the literature on group size effects by showing that membership in majority and minority groups has specific effects on ingroup favoritism towards and derogation of the majority outgroup.

More generally, these findings go beyond past research by suggesting that minority membership can lead individuals to cross the fine boundary between expressing one's attachment to the ingroup and harming the outgroup – at least at the symbolic yet pervasive level of linguistic discrimination. If a certain degree of ingroup favoritism can be considered a direct consequence of group membership, outgroup derogation can actually have detrimental effects on intergroup relations by hindering communication and future interaction with the outgroup. Future studies should address this issue by examining the consequences of portraying the outgroup with negative abstract language.

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Footnotes

[1]It should be noted that due to the characteristics of the Tajfel allocation matrices, ingroup favoritism and outgroup derogation cannot be distinguished as they can be expressed through the same choices (Rubini & Moscatelli, 2004).

[2]Seven participants were excluded as they did not provide both positive and negative terms referred to the target of description. Doing this, we were able to avoid missing values and therefore the score of 0 in the positive or negative index (cf. Rubini et al., 2014, for more details on the calculation of abstraction scores). Four participants were also excluded as they provided only sentences which were not related to the target they were required to refer to (e.g., "I do not like this task").

[3]Examples of sentences were: "He/she *assigned* 2 seconds of noise to the member of Alpha/Omega group" (DAV); "He/she *favored* the member of Alpha/Omega group" (IAV); "He/she *likes* the member of Alpha/Omega group" (SV); "He/she was *impartial*" (ADJs).

[4]To control for the possible effect of the absolute number of terms used on positive and negative abstraction scores, the number of terms was entered as covariate in a 3 (group size) × 2 (target group membership) × 2 (valence of language) ANCOVA on linguistic abstraction scores. The analysis revealed no significant relationship between the covariate and the dependent variables, $F(1, 135) = 0.04$, $p = .835$.

Figure 1. Positive and Negative Abstraction Scores as a Function of Relative Group Size and Target's Group Membership.
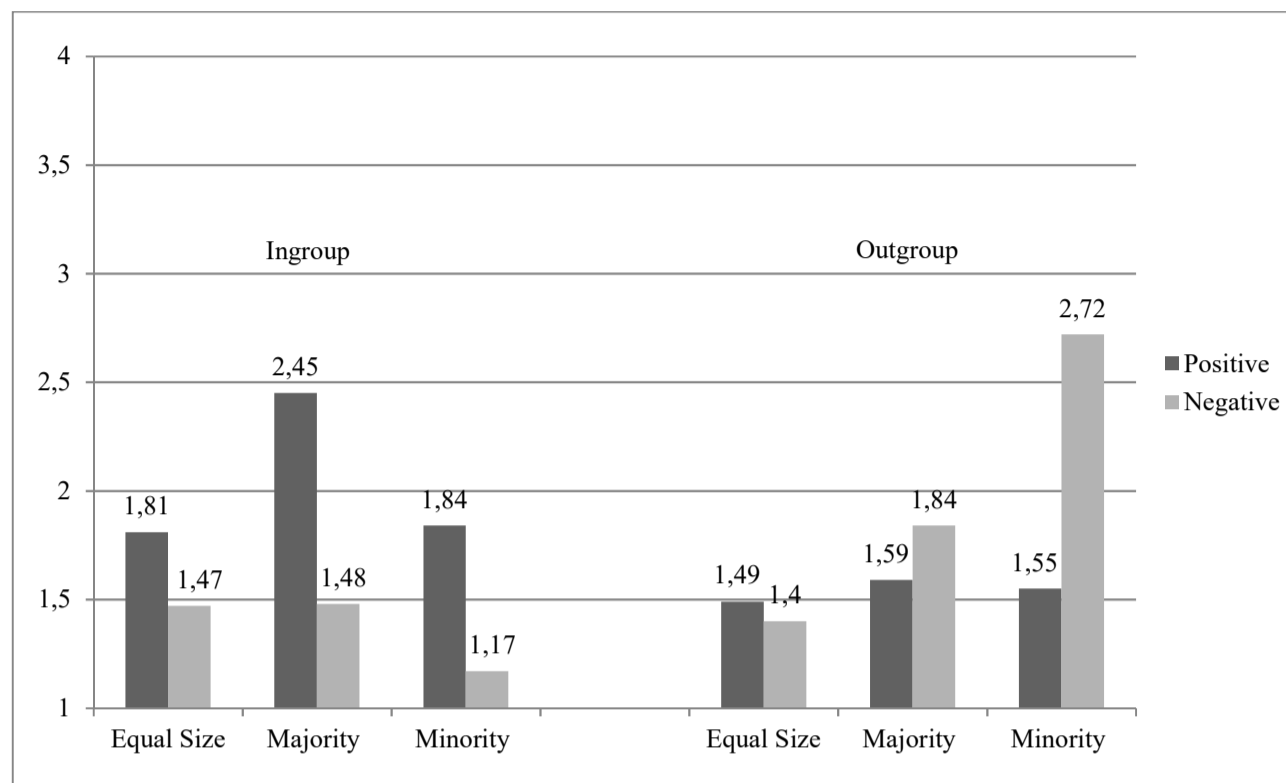
Note. Positive and negative abstraction scores were obtained by assigning increasing weights to increasing levels of abstraction of linguistic categories (i.e., from 1 for descriptive action verbs to 4 for adjectives), and then dividing the summed weights by the total number of positive and negative terms. Scores ranged from 1 to 4.