Advantaged groups are more variable than disadvantaged groups: The case of preferences and habits

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Abstract
Being member of a disadvantaged group is a threatening experience. One way to deal with this threat is to increase similarity and cohesiveness with other group members. Applied to habits and preferences, we hypothesized that a disadvantaged group would be more homogeneous than an advantaged group. We conducted a questionnaire study in which we asked members of an advantaged and members of a disadvantaged group to report their habits and preferences, as well as other information about themselves. As predicted, we consistently found a difference in variability between the two groups. Members of the disadvantaged group were more similar to each other than members of the advantaged group with regard to restaurant attendance, the number of books they read, the types of sports they prefer, the types of books/magazines they read, the radio station they prefer, and the number of children they have. These results are discussed in light of the out-group homogeneity effect and with reference to within-group pressures to conformity.

Key words: variability, intra-group differentiation, habits, preferences.

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INTRODUCTION

Advantaged groups are generally perceived as more heterogeneous than disadvantaged groups (Brauer, 2001; Voci, 2000). Moreover, this difference is perceived by both members of the advantaged groups and the disadvantaged groups. In other words, members of a disadvantaged group generally perceive their in-group as less variable than an advantaged out-group, and members of an advantaged group tend to see their in-group as more variable than a disadvantaged out-group (Devos, Comby, & Deschamps, 1996). This difference has largely been attributed to perceptual biases. Presumably, members of disadvantaged groups have a motivational incentive to perceptually exaggerate the within-group similarities in their in-group (leading to an in-group homogeneity effect), whereas members of advantaged groups lack the motivation to process individuating information about the out-group (leading to an out-group homogeneity effect; Simon, 1992; Simon, Glässner-Bayerl, & Stratenwerth, 1991). Brauer (2001) was the first to suggest that the observed differences may simply be a reflection of reality. According to this account, members of advantaged groups are objectively more variable than members of disadvantaged groups, and participants are quite accurate in perceiving these differences (see also Brauer & Judd, 2000). The purpose of the present research was to further explore this hypothesis. In particular, we examined the extent to which members of an advantaged group differed from each other with regard to their preferences and habits compared to members of a disadvantaged group.

Before presenting the theoretical basis of the above mentioned hypothesis, it is necessary to define the terms “advantaged” and “disadvantaged”. By “advantage” we mean any type of superiority of one group compared to another. This superiority may stem from the fact that one group has power over the other, has a higher social status, or is a numerical majority. One group may also be superior to another because it has more knowledge, more experience, more money, better weapons, or more food. The advantage can even be temporary, as in the case of a sports team who has the leading score in a match, or a group of candidates who have more points than another group of candidates in a game show on television. Other researchers prefer the term “power” and refer to different types of advantages with “expert power”, “legitimate power”, “coercive power”, “reward power”, “referent power”, and “informational power” (Raven, 2001). Undoubtedly, these different types of superiority have very different psychological effects. However, we are suggesting that they have similar effects on within-group differentiation. Whatever the type of superiority, we predict that members of an advantaged group will progressively become more dissimilar from each other than members of a disadvantaged group.

Why would an advantaged group be objectively more heterogeneous than a disadvantaged group? Belonging to a disadvantaged group is a threatening experience (Schwartz, Dodge, & Coie, 1993). Members of such groups are partially dependent on the advantaged group, and have only limited influence on the decisions made by the advantaged group that have consequences for the disadvantaged group. In order to manage this threatening situation, members of disadvantaged groups “close rank” and focus on characteristics that they share with other in-group members (Simon, 1992). Deviance from the group norms is problematic as it may further weaken the group’s position, and pressures to conformity are relatively high. As a result, members of disadvantaged groups progressively adopt more and more similar attitudes, preferences, and habits. In short, they become objectively more homogeneous. Research on group entitativity suggests that such a strategy is adaptive. Highly entitative groups are perceived as having greater intentionality and capacity for action (Sacchi, Castano, & Brauer, 2005). When these characteristics are perceived in an outgroup they make the outgroup more threatening, but these same characteristics are highly valued in allies or the ingroup (Castano, Sacchi, & Gries, 2003; Dasgupta, Banaji, & Abelson, 1999; for a review, see Castano, 2004).

Belonging to an advantaged group, however, is generally a comfortable experience. Given that one controls resources and outcomes, one does not feel threatened. Compared to members of disadvantaged groups, members of advantaged groups have a lesser need for affiliation and can therefore satisfy to a greater extent their need for differentiation (Brewer & Roccas, 2001). They value similarity to a lesser extent and focus more on characteristics that differentiate them from other in-group members (Lewin, 1948; McGuire, 1984). Social norms are less constraining, and deviations from the group norm are sanctioned to a lesser extent. It is believed that members of advantaged groups become increasingly more dissimilar in their attitudes, preferences, and habits. As a result, they become a more heterogeneous group than members of disadvantaged groups.

According to our knowledge, there is only one paper that has directly examined hypothesized differences in actual variability. Guinote, Judd,
and Brauer (2002) invited eight participants to come to the laboratory and randomly attributed them to either a high power or a low power group. Participants were told that members of the low power group would generate solutions to problems that would subsequently be evaluated by the members of the high power group. Participants in each group then engaged into two “practice tasks”, presumably to allow everybody to familiarize themselves with the type of problems that would later be solved by the members of the low power group. After doing the practice tasks for 20 minutes, participants were asked to present themselves. The group interactions and the self-presentations were videotaped. Analyses of the self-presentations revealed that members of the advantaged high-power groups talked more and conveyed more individuating information about themselves. In addition, the video-tapes were viewed by observers who were not informed about the group’s power position. The “blind” observers perceived the high-power groups to be more variable than the low-power groups. They also considered the members of the high power groups as better suited for a supervisor position and as less well suited for a subordinate position than members of the low power groups. Note that this difference in variability cannot be attributed to perceptual biases because the observers were not part of the initial groups and did not know the groups’ power status. This research shows that members of high-power groups are objectively more dissimilar from each other than members of low-power groups. This difference was detectable after only 20 minutes of group interaction.

There is also some indirect empirical support for the above mentioned differential heterogeneity hypothesis. The first type of indirect evidence comes from studies on perceived variability. Simon et al. (1991) demonstrated that both heterosexual and homosexual men agreed that heterosexual men are a more heterogeneous group than homosexual men. There is a general tendency among male and female participants to perceive men as more variable than women (Brown & Smith, 1989; Lorenzi-Cioldi, Eagly, & Stewart, 1993). Lee and Ottati (1993) showed that both American and Chinese participants perceived Americans to be more dissimilar from each other than Chinese. Brauer (2001) interrogated waiters, hair dressers, lawyers, and doctors who indicated how variable they perceived their in-group and two of the three out-groups. All participants, irrespective of their own occupation, perceived lawyers and doctors to be more variable than waiters and hair dressers. Karasawa, Karasawa, and Hirose (2004) conducted a laboratory experiment in which they used Brauer’s four-group design (two high status and two low status groups) but randomly attributed participants to the experimental groups. Group members interacted with other in-group and out-group members for several hours. As in the original study, there was a general tendency to perceive the advantaged groups as more heterogeneous than the disadvantaged groups. Although these studies have generally not been explained in terms of real differences in variability, the most parsimonious explanation for them is to assume that the advantaged groups are actually more heterogeneous than the disadvantaged groups and that members of both groups accurately perceive this difference.

Further indirect evidence for the differential heterogeneity hypothesis comes from research on social norms and pressures to conformity. Power, social status, and other type of advantages confer the ability to resist social control and influence from others (Cartwright, 1959; Lewin, 1948). In other words, members of an advantaged group tend to resist social constraints on behavior that other people or situational forces may impose (Hollander, 1958). They behave more idiosyncratically, that is, more in agreement with their desires, preferences, and internal dispositions (Hecht & LaFrance, 1998). One way to demonstrate one’s membership in an advantaged group is to be different from others and to transgress social norms. It is not surprising, then, that powerful individuals interrupt others more frequently (DePaolo & Friedman, 1998), eat cookies offered by the experiencer with more glibly (Ward & Keltner, 1998, cited in Keltner, Gruenfeld, & Anderson, 2003), and violate more frequently politeness-related communication norms (Brown & Levinson, 1987). The members of disadvantaged groups are influenced to a greater extent by social norms and the behaviors of others. They behave according to what is socially acceptable and what others do (Winter, 1988). As a result, there should be less variability in members of a disadvantaged group regarding their preferences and habits than in members of an advantaged group.

The research on the relationship between power and approach/action tendencies also provides indirect support for our hypothesis. Keltner and his colleagues described a number of studies showing that powerful individuals display greater behavioral disinhibition than individuals with less power (Keltner et al., 2003). More precisely, individuals who are in a powerful position or who are part of an advantaged group show their emotional reactions more openly (Anderson & Berdahl, 2002), have a reduced gestural activity (Ellyson & Dovidio, 1985), display more explicit nonverbal behaviors (Hall, Rosip, Smith-LeBeau, Horgan, & Carter, in press),
and flirt in a more disinhibited manner (Gonzaga, Keltner, Londahl, & Smith, 2001). Powerful individuals are also more likely to take action rather than remain passive (Galinsky, Gruenfeld, & Magee, 2003). Applied to the present paper, these studies suggest that members of an advantaged group will show their preferences more openly and will act upon their preferences more frequently than members of a disadvantaged group.

As the previous paragraphs show, there is some evidence for the hypothesis that members of an advantaged group are more heterogeneous than members of a disadvantaged group. Most of the evidence is indirect, as the relevant studies were designed to test other predictions. The only study in which our hypothesis was tested directly is a laboratory study in which group members interacted for 20 minutes and in which blind observers made general variability judgments based on video recordings (Guinote et al., 2002). Our goal in the present research was to test the differential variability hypothesis with natural groups whose members had a long-standing experience of being in an advantaged or a disadvantaged position. We also used a more realistic indicator of variability. More precisely, we focused on people’s habits and preferences. We did this for two reasons. First, participants are generally quite accurate in reporting their habits. After all, a given individual is able to accurately report that his/her habits include going to the restaurant and watching TV whereas s/he seldom plays computer games or team sports. Likewise, s/he knows that s/he likes French cooking better than Asian cooking. Second, preferences and habits are the first notions that come to mind when people talk about within-group variability. It seems to us that when someone talks about a “pretty heterogeneous group”, s/he generally means that the group’s members differ radically in their hobbies, activities, and attitudes. What makes a group heterogeneous is the fact that its members do not have the same preferences and do not habitually engage in the same type of activities. In the present study, we asked participants for their preferences and habits in the areas of watching television, listening to music, listening to the radio, reading, talking on the phone, doing sports, playing video games, going to the movies, playing an instrument, and eating in restaurants. The participants were members of natural groups whose relative position was defined by the educational level. Our advantaged group contained individuals with a high educational level whereas our disadvantaged group consisted of individuals with a low educational level.

Differences in variability

METHOD

Participants

One hundred individuals were recruited at a notary’s office. The notary asked them if they would be willing to fill out a questionnaire on their “preferences and habits” while waiting for her to finish with the previous client. All but two individuals complied with the request. There were 53 men and 46 women (one participant did not indicate his or her gender). The mean age was 43.8 years ($SD = 14.4$ years; range = 18-79 years).

Design

Participants were divided into two groups based on their educational level. All participants who had successfully completed at least two years of college training were assigned to the “advantaged group”. All participants without a high school degree (baccalauréat) were assigned to the “disadvantaged group”. Participants who did not clearly belong to either of the two categories (those who had a high school degree but had less than two years of college training) were excluded from the analyses. An additional participant who had not indicated his educational level was also excluded, yielding a final $N$ of 74 participants.

Questionnaire

The questionnaire contained a large number of items inquiring about participants’ habits and preferences in daily life. Twelve items asked participants about the amount of time or the frequency with which they engaged in certain activities. Participants indicated how many hours per week they spend watching television, listening to music, listening to the radio, reading (except work), and talking on the phone (except work). They were asked how many hours per month they spend doing sports or playing video games. Participants also indicated the number of time per year they go to the cinema, to the restaurant, to the theatre, to the museum, and how many books they read per year.

Eighty-three items asked participants about their preferences in seven domains: television, musical, cinema, restaurants, reading, music instru-
ments, and sports. In the television domain, 10 types of programs were presented to participants (Series/Sitcoms, News, Games, Documentaries, Sports, Movies, Reality TV, Cultural Programs, Musical Programs, and Humoristic Programs). The 11 subcategories in the music domain were French, International, Techno/Dance, Rap/R&B, Reggae, Rock/Pop, Classical, Jazz, Country, R&B, and Movie Soundtracks. The 11 types of movies in the cinema domain were Detective/Thriller, Drama, Action/Adventure, Animation, Horror, War, History, Erotic Movies, Fantasy/Science-fiction, Musical Comedy, and Comedy. The 8 subcategories in the restaurant domain were Regional (Auvergne), Traditional French, Nouvelle Cuisine, Creperies, Italian/Pizzeria, Other European, Asian, and North/South American. The 15 subcategories in the reading domain were Daily Newspapers, News Magazines, Sports Magazines, Auto/Motorcycle Magazines, Cultural Magazines, Financial Magazines, Masculine Magazines (e.g., Playboy), TV magazines, Fiction, Science-fiction, Mysteries, Comics, Romance, Humor, and Biographies. The 12 subcategories in the instrument domain were Classic Guitar, Electric Guitar, Piano, Synthesizer, Accordion, Flute/Clarinet, Base, Drums, Violin, Cello, Trumpet, and Saxophone. The 18 subcategories in the sports domain were Soccer, Rugby, Basketball, Handball, Tennis, Swimming, Jogging, Track and Field, Cycling, Golf, Martial Arts, Bodybuilding, Badminton, Climbing, Driving, Fencing, Boxing, and Volleyball. For each of the subcategories in each of the domains, participants indicated how frequently (from 1 = “never” to 4 = “very often”) they watched each of this type of TV program, they listened to this type of music, watched this type of film in the movie theatres, went to this type of restaurant, and read this type of newspaper/magazine/book. The questions were always formulated in a relative manner so that there would be no differences in scale usage between individuals who were very active in one domain (i.e., who went frequently to the movies) and those who were less active. For example, participants were asked “When you watch television what do you like to watch?” or “When you listen to music, what kind of music do you like to listen to?”. For the musical instruments and the sports domains, participants simply indicated how many hours per month they played each instrument and practiced each sport. Additional questions asked participants about their most preferred radio station and the first thing they drink in the morning. Finally, participants answered several demographic questions regarding their gender, age, marital status, educational level, and the number of children they have.

RESULTS

Our hypothesis was that members of advantaged groups are more variable than members of disadvantaged groups. As a result, we were primarily interested in comparing the standard deviations, rather than the means, of the two groups.

Table 1 contains the means and the standard deviations of the responses given to the 12 items regarding the amount of time or the frequency with which participants engaged in certain activities. Consistent with our hypotheses, members of the advantaged group were more variable (had greater standard deviations) than members of the disadvantaged group on 11 of these 12 items, the sport item being the only exception. For each of the 12 items we conducted two inferential tests, an independent samples t-test (testing whether the means differ significantly from each other) and Levene’s test for equality of variances (testing whether the variances differ significantly from each other). The results of these tests are reported in the last two columns of Table 1. The series of t-tests showed that members of the advantaged group go more often to the movie theatre, t(72) = 2.05, p < .05, and more often to the restaurant, t(72) = 2.67, p < .01, than members of the disadvantaged group. These results are not surprising and of marginal theoretical interest. More relevant for the present purpose are the results of the Levene’s tests for the equality of variances. Participants in the advantaged group were significantly more variable in their restaurant attendance (s = 32.82) than participants in the disadvantaged group (s = 22.14), F = 5.57, p < .03. There was a marginally significant difference between the variances with regard to the number of books participants read per year, F = 3.84, p = .054, and the number of times they go to the movie theatre per year, F = 3.02, p = .087.

It should be noted that Levene’s test for equality of variances is a particularly conservative test that is significant only when the variances are radically different from each other. In order to explore this issue further, we standardized all items so that the standard deviations could be compared across items. More precisely, we standardized all items and calculated for each of the 12 items the standard deviation for the advantaged group and the standard deviation for the disadvantaged group. The 24 standard deviations were copied into a new data file with twelve observations (each item was one observation) and two variables (one variable for the standard deviations of the advantaged group and one variable for the standard deviations of the disadvantaged group). Finally,
we compared the 12 pairs of standard deviations with a paired-samples t-test. This t-test was statistically significant, $t(11) = 2.87, p < .02$, indicating that the standard deviations of the advantaged group were on average greater than the standard deviations of the disadvantaged group. Consistent with our predictions, members of the advantaged group were more heterogeneous than members of the disadvantaged group.

Table 1
Means, standard deviations, and inferential statistics for the 12 items measuring habits

<table>
<thead>
<tr>
<th>Item</th>
<th>disadvantaged group</th>
<th>advantaged group</th>
<th>independent samples t-test for the equality of variances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>M</td>
<td>s</td>
<td>M</td>
</tr>
<tr>
<td>Television (hours per week)</td>
<td>14.17</td>
<td>9.94</td>
<td>12.36</td>
</tr>
<tr>
<td>Music (hours per year)</td>
<td>17.21</td>
<td>14.50</td>
<td>11.80</td>
</tr>
<tr>
<td>Radio (hours per week)</td>
<td>14.00</td>
<td>14.22</td>
<td>11.30</td>
</tr>
<tr>
<td>Computer games (hours per month)</td>
<td>3.21</td>
<td>10.47</td>
<td>4.06</td>
</tr>
<tr>
<td>Sport (hours per month)</td>
<td>7.65</td>
<td>11.38</td>
<td>6.94</td>
</tr>
<tr>
<td>Reading (hours per week)</td>
<td>7.13</td>
<td>4.48</td>
<td>5.06</td>
</tr>
<tr>
<td>Telephone (hours per week)</td>
<td>4.00</td>
<td>4.46</td>
<td>5.56</td>
</tr>
<tr>
<td>Movie theatre (times per year)</td>
<td>4.13</td>
<td>5.40</td>
<td>11.62</td>
</tr>
<tr>
<td>Restaurant (times per year)</td>
<td>26.75</td>
<td>22.14</td>
<td>46.50</td>
</tr>
<tr>
<td>Theater (times per year)</td>
<td>3.71</td>
<td>5.38</td>
<td>5.54</td>
</tr>
<tr>
<td>Museum (times per year)</td>
<td>4.00</td>
<td>6.39</td>
<td>5.50</td>
</tr>
<tr>
<td>Books (number per week)</td>
<td>9.46</td>
<td>13.26</td>
<td>15.80</td>
</tr>
</tbody>
</table>

The next set of analyses was carried out on participants' preferences in the seven domains television, music, cinema, restaurants, reading, musical instruments, and sports. For each domain and for each subcategory, we calculated the standard deviations for the disadvantaged group and the advantaged group. These values were copied into a new data file. In this file, there were two variables for each domain (one variable for each of the two standard deviations). The number of observations was determined by the number of subcategories in each domain. For example, the data file for the television domain contained 10 observations, one for each type of television program; the data file for the music domain contained 11 observations because participants had indicated their preferences for 11 types of music (see Method section), and so forth.1 The averages of the standard deviations for each of the seven domains are reported in Table 2. As can be seen, the average standard deviations of the advantaged group were greater than the average standard deviations of the disadvantaged group in all seven domains. Paired-sample t-tests revealed that the difference in standard deviations was statistically significant in the sports domain, $t(10) = 3.14, p < .02$, and in the reading domain, $t(14) = 2.24, p < .04$. It appears then that members of an advantaged group were consistently more variable in their preferences than members of the disadvantaged group. Although this difference in variability was significant in only two out of seven dimensions, it should be noted that we did not find a single instance in which the advantaged group were less heterogeneous than the disadvantaged group.

When asked about their preferred radio station, participants named a total of 14 different stations. Figure 1 shows how frequently each radio station was named by members of the two groups. Members of the disadvantaged group were considerably less variable in their preferences than members of the advantaged group. Indeed, the five most popular radio stations (Europe 1, Chérie FM, France Info, France Inter, and Nostalgie) were cited by 92% of the members in the disadvantaged group but by only 48% of the members in the advantaged group. A Chi-square test revealed that this difference was statistically significant, $\chi^2 = 12.60, p < .001$. The

1. We only considered items for which at least one of the groups had a mean value different from zero. For example, some instruments were not played and some sports were not practiced by any of our participants. These items were removed from the analyses.
analyses on the first thing that participants drink in the morning yielded a similar result. The most popular morning drinks (black coffee, coffee with milk, and tea) are listed by 88% of the members in the disadvantaged group but by 70% of the members in the advantaged group. This difference is marginally significant, $\chi^2 = 2.70, p < .10$. Our final analyses were carried out on the number of children. On average, members of the disadvantaged group had 1.54 children ($s = .88$) and members of the advantaged group 1.24 children ($s = 1.36$). An independent-samples $t$-test showed that the means did not differ significantly from each other, $t(72) = .99, ns$. Levene’s test for equality of variances revealed, however, that there was a (marginally) significant difference in variability, $F = 3.86, p = .053$. Regarding the number of children, members of the advantaged group were more variable than members of the disadvantaged group.

Table 2
Average standard deviations and inferential statistics for the different items measuring preferences

<table>
<thead>
<tr>
<th>Item</th>
<th>$N$</th>
<th>Disadvantaged group</th>
<th>Advantaged group</th>
<th>Paired-samples $t$-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Television</td>
<td>10</td>
<td>.80</td>
<td>.83</td>
<td>$p = .74$</td>
</tr>
<tr>
<td>Music</td>
<td>11</td>
<td>.72</td>
<td>.73</td>
<td>$p = .94$</td>
</tr>
<tr>
<td>Cinema</td>
<td>11</td>
<td>.66</td>
<td>.71</td>
<td>$p = .37$</td>
</tr>
<tr>
<td>Restaurants</td>
<td>8</td>
<td>.74</td>
<td>.75</td>
<td>$p = .82$</td>
</tr>
<tr>
<td>Reading</td>
<td>15</td>
<td>.70</td>
<td>.81</td>
<td>$p = .04$</td>
</tr>
<tr>
<td>Musical instruments</td>
<td>5</td>
<td>1.02</td>
<td>1.18</td>
<td>$p = .91$</td>
</tr>
<tr>
<td>Sports</td>
<td>11</td>
<td>.66</td>
<td>2.46</td>
<td>$p = .01$</td>
</tr>
</tbody>
</table>

Note: 1 = Le Mouv', 2 = Info Route, 3 = RTL, 4 = Skyrock, 5 = Europe 1, 6 = Chérie FM, 7 = France Info, 8 = France Inter, 9 = Nostalgie, 10 = NRJ, 11 = Europe 2, 12 = France Culture, 13 = RMC Info, 14 = RFM.

Figure 1. Percentage of participants who listed a particular radio station as their preferred radio station.

DISCUSSION

The results of the present study provide evidence for the idea that advantaged groups are more heterogeneous than disadvantaged groups. This difference was observed for activities people habitually engage in: there was a general tendency for highly educated individuals to be more dissimilar from each other than less well educated individuals with regard to habits such as going to a restaurant, going to the movies, and reading books. The same difference in variability was observed for preferences: members of the advantaged group had more varied likes and dislikes in a variety of domains, such as their preferred sport or their preferred
magazine. A similar effect was observed with the radio station that participants listened to most of the time and with the first drink that participants had in the morning. Finally, members of the advantaged group were more variable with regard to the number of children they had. All in all, members of the disadvantaged group are more homogeneous, presumably because they value within-group similarity as a means to deal with their uncomfortable position.

As an alternative explanation, one might suggest that members of the disadvantaged group are more homogeneous because they cannot financially afford to be more variable. After all, educational status is correlated with income. On two out of three habits for which we found a significant (or marginally significant) difference in variability, there was also a significant difference in means: highly educated people go more frequently to the restaurant and to the movie theatre than less well educated people. It may well be then that members of the disadvantaged group would like to differentiate themselves from their fellow in-group members but cannot afford to do so. Although participants’ financial resources may contribute to the effect, we do not think that this explanation can fully account for the observed differences in variability. First, the difference in variability is a consistent pattern that characterizes all habits (except one), including habits that are independent of financial resources, such as the radio stations and the morning drinks. Second, the questions assessing participants’ preferences were worded in a manner that prevents an explanation in terms of financial opportunities (“When you go to the restaurant, to what kind of restaurant do you like to go to?”).

The findings reported in this paper have important implications for research in social psychology. Above all, they show that there can be objective differences in variability between natural groups. As such, they shed some light on the interpretation of earlier studies on perceived variability. The fact that members of advantaged groups tend to perceive a disadvantaged out-group as more homogeneous than the advantaged in-group, whereas members of disadvantaged groups generally perceive the disadvantaged in-group as more homogeneous than an advantaged out-group, does not necessarily imply that the members of the two groups apply different perceptual biases. A simpler, and more straightforward explanation is that the advantaged group is objectively more heterogeneous than the disadvantaged group (Brauer, 2001; Brauer & Judd, 2000). Admittedly, there are also a number of laboratory studies who have shown asymmetries in perceptual biases using standardized material about fictitious target groups (Lorenzi-Cioldi, 1998; Simon & Brown, 1987). We are not saying that members of different groups do not apply different perceptual biases. Quite to the contrary, we consider it quite likely that being member of an advantaged versus a disadvantaged group has a major impact on the way an individual sees his or her social environment. What we are saying, however, is that in a variety of domains advantaged groups are actually more variable than disadvantaged groups, and that the observed asymmetries in perception of homogeneity may partially reflect these actual differences.

It may well be, then, that homosexual men are more similar to each other than heterosexual men (Simon et al., 1991), that female university professors are less variable than male university professors (Brown & Smith, 1989), that the Chinese are a more homogeneous group than the Americans (Lee & Ottati, 1993), that lawyers and doctors are more heterogeneous groups than waiters and hair dressers (Brauer, 2001), and that prison inmates resemble each other more than prison guards (van Knippenberg, Blaauw, & Vermunt, 1996). As we suggested in the introduction, this difference in variability may be caused by the fact that disadvantaged groups value within-group similarity and cohesion in order to deal with the threatening experience of being a disadvantaged group (Castano, 2004). Members of advantaged groups, on the contrary, are believed to value within-group differentiation and individuality.

In most studies published in social psychological journals, the researchers draw inferences on differences between means. In the present paper, we have performed inferential statistics on differences between variances. This new approach may open the way for innovative theoretical questions. Usually, highly different variances are considered a problem because they indicate that researchers cannot conduct a standard t-test but have to employ a more conservative data analysis strategy instead. In our research, we predicted and found statistically significant differences between variances. It is possible that in the past there were many instances in which researchers compared an advantaged and a disadvantaged group and found no significant differences between the means. They may have observed different variances but, not knowing what to do with this difference (or not having a theoretical framework with which to explain this difference), they may have decided to not publish their results. We hope that the present paper makes a contribution by showing that significant differences between variances can constitute evidence for interesting theoretical questions.
In the present study, we opted for a high external validity by choosing natural groups. Obviously, the price we paid is a relatively low internal validity. Given that participants were not assigned randomly to experimental conditions, we cannot be sure that the observed differences in variability are really due to the advantaged or disadvantaged status of the groups. Readers should know, however, that we have conducted other studies in which we used experimental designs (i.e., artificial groups created in the laboratory) or quasi-experimental designs (i.e., natural groups whose advantaged status is only temporary; see Brauer, Ginet, Chambon, & Chekroun 2005) and in which we obtained very similar results. In all instances, the members of the advantaged group were more dissimilar to each other than the members of the disadvantaged group.

It would be of interest to identify the mechanism by which the objective difference in variability is produced. Based on the work on within-group differentiation (Brewer & Pickett, 1999) and conformity (Hornsey & Jetten, 2005), one might predict that norm transgressions and deviant group members are not dealt with in the same manner in different groups. More precisely, it seems likely that social control — negative sanctions applied to a norm transgressor — is more frequent in disadvantaged than in advantaged groups. This hypothesis suggests that social norms play a greater role and that social influence among group members is more prevalent in disadvantaged than in advantaged groups. As such, it may be that many effects observed by social psychologists are moderated by the relative status of the participants’ group membership: members of disadvantaged groups may be influenced to a greater extent by other in-group members, by group norms, by the presence of others, by situational constraints and to a lesser extent by their internal dispositions and preferences than members of advantaged groups. This difference could be one of the reasons why advantaged groups are objectively more variable than disadvantaged groups.

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